REPRODUCTIVE AND CHILD HEALTH

CARE & PRACTICES

Manoshi Das
Prankrishna Banik

REANG TRIBES IN TRIPURA

Tribal Research & Cultural Institute
Government of Tripura

REPRODUCTIVE AND CHILD HEALTH
CARE & PRACTICES

REANG TRIBES IN TRIPURA

REPRODUCTIVE AND CHILD HEALTH
CARE & PRACTICES

REANG TRIBES IN TRIPURA

By
Dr. Manoshi Das
Prankrishna Banik

TRIBAL RESEARCH AND CULTURAL INSTITUTE
GOVERNMENT OF TRIPURA, AGARTALA

TRIBAL RESEARCH AND CULTURAL INSTITUTE
GOVERNMENT OF TRIPURA, AGARTALA
Phone : 0381 2324389
e-mail : dir.trci-tr@gov.in
web : www.tritripura.in

Reproductive and Child Health : Care & Practices
Reang Tribes in Tripura

© *Tribal Research and Cultural Institute*
Government of Tripura, Agartala
First Published 2016
ISBN : 978-81-932589-5-8

Price : Rs. 133/-

Printed by :
New Quick Print, 11 Jagannathbari Road, Agartala.
Ph : 9436129362 # e-mail : newquickprint573@gmail.com

CONTENTS

Preface		*vii*
Message		*xi*
Foreword		*xiii*
List of Tables and Figures		*xv*
Abbreviation		*xix*
1.	Introduction	1-24
2.	Literature Review	25-54
3.	Reang Tribes in Tripura: A Brief Account	55-74
4.	Health Scenario of Tripura	75-96
5.	Women and Child Health	97-155
6.	Summary, Recommendation and Conclusion	156-168
	Bibliography	169-178
	Annexure-1 (List of different Plants, Parts and using process)	179-185

PREFACE

Health is a pre-requisite for human development and is essentially concerned with the well being of the common man. Health is a normal function of the body, and not only it is medical care, but an overall integrated development of the society - i.e. cultural, economic, education, social and political-administration. The health status of a society is intimately related to its value system, its philosophical cultural traditions and its social, economic and the political organizations. Therefore, an integrated approach is called for the raising the living standards and improving health status of the community.

Tribal people constitute a significant proportion in population of India and the cultural pattern varies from tribe to tribe and region to region. Moreover, cultural settings, eco-systems, magico-religious beliefs and treatment etc. influence tribal health and health seeking behaviour. The study of health culture of a particular community is important because (a) the health problems and the procedure to handle such problems and other health practices are influenced by the complex interplay of social factors and (b) implementation of health services would be difficult without the knowledge of the community's traditional health culture. Again most of the studies on tribal health are sporadic and fragmented in nature.

There is an urgent need for initiating a comprehensive study on tribal health in the changing scenario. In view of the paucity of comprehensive health related studies in Tripura among the tribals in general and Particularly Vulnerable Tribal Groups (PVTGs) in specific, the present study was conducted to observe the dynamics of health care practices and the prevalent diseases of tribal community in Tripura. The study may be of immense significance for the policy imperatives and administering the health programmes in tribal concentrated areas.

The book is an outcome of the study funded by Tribal Research & Cultural Institute of Tripura tentatively consists of six chapters. The **first chapter** is an introduction which mainly signifies understanding of health, aspects of health, determinants of health, tribes and health, nutritional status of tribe, women and health etc. In the **second chapter**

is a thorough review on pertinent literature which helped to understand the previous concern of various renowned authors/scholars regarding tribal health. **Third chapter** is basically a discussion on a brief account of Reang tribes - the only PVTGs in Tripura, which consists of history and origin of Reang, culture, customs, marriage system, religious belief and practices and also shows a quantitative glimpse of Reangs in Tripura. **Fourth chapter** is concerned about Health Scenario in Tripura. It includes some statistical review of physical health infrastructure (Women and Child) over the State and National level.

Chapter five is an important part as it is represents the status of Women and Child health in Tripura based on the field survey. Chapter is divided into six parts - information regarding family background; general profile of women and their health status; women health care and practices; mother health care and practices; children health care and practices and health care facilities.

And last i.e. **Chapter six** summarise the important findings. It also makes some necessary recommendations and draw conclusion which would be helpful for the policy makers towards improvement of tribal health specially Primitive Tribal Women (Reang) and Child Health Care Practices.

This book is an outcome of the research study with financial assistance from Tribal Research and Cultural Institute, Government of Tripura.

We express our deepest sense of gratitude to Shri. Sunil Debbarma, Director and Shri. Sailohnuna, Former Director, Tribal Research and Cultural Institute, Tribal Welfare Department, Govt. of Tripura. We are also thankful to Shri. Prafulla Reang, Deputy Director, Shri. Bidyut Kanti Dhar , Research Officer and Shri. Sukanta Pal, Former, Research Officer, Tribal Research and Cultural Institute for their heartfelt cooperation and necessary support for the entire study work.

We are also indebted to Dr. Jayanta Choudhury, Asst. Professor, Dept. of Rural Management and Development, Tripura University for his sincere academic support to complete this book successfully and we also express our deepest appreciation to Miss Dipali Reang,

student of MRMD, Shri. Genda Reang, Shri. Poltu Reang for their outstanding effort towards collection of both qualitative and quantitative data during field survey. We would like to express our cordial thanks to Miss. Reshmi Ghosh, Mrs. Papiya Ghosh, Mrs. Anamika Sen, Miss. Piyali Sengupta, Students of MRMD, Shri. Santanu Chakraborty, (MA. English) for their sincere effort as a data processer in this study.

We also want to acknowledge the cooperation of the Reang women respondents who provided and share information in long interview schedule during the survey and without their response study may not be complete successfully.

And, last but not the least, We want to give deepest love and thanks to our parents for their sacrifice, strong encouragement and moral support during the study.

Hope this book will be helpful for the policy makers, academicians, students, scholars those are working or interested in the related filed.

However, we are solely responsible if any unwanted wrong information or mistakes that may remain.

22.8.2016
Agartala

Dr. Manoshi Das
Prankrishna Banik

MESSAGE

Several projects had been implemented for Tribal Development in Tripura like all other Tribal concentrated states in India. However till now numbers of Tribal communities specially Particularly Vulnerable Tribal Groups (PVTGs) are facing tremendous problem related to Reproductive and Child Health (RCH) care issues and they depended on their own traditional belief and cultures. The issues of this book are major contribution towards much needed Reproductive and Child Health care issues and practices of Particularly Vulnerable Tribal Groups (PVTGs) in Tripura.

This book is a research outcome conducted by Dr. Manoshi Das and Shri Prankrishna Banik with financial support from Tribal Research & Cultural Institute, Government of Tripura. The researchers brings about the clear idea of traditional beliefs, norms, cultures, rituals and gives suggestive solutions to shape Reproductive and Child Health situation of Particularly Vulnerable Tribal Groups (PVTGs) in Tripura.

I strongly believe that the information, findings and recommendations of this book will be immense helpful for improvement of 'Reproductive & Child Health: Care and Practices' among PVTGs, through dissemination of knowledge, creating awareness campaigns, applying IEC activities and also implementing the tribal specific schemes and health related projects in Tripura as well as other PVTG concentrated states in the Country.

Shri Sunil Debbarma, TCS (SSG)
Director
Tribal Research & Cultural Institute
Government of Tripura

FOREWORD

PVTGs constitute the most vulnerable section among tribal and inhabit isolated, remote and difficult areas in small and scattered hamlets/ habitats. There are certain factors which make people healthy; these factors are called the Determinants of Health. The determinants of health include: The social and economic environment, the physical environment, and the person's individual characteristics and behaviors.

The United Nations (UN) members met in 2000 and set themselves eight goals as "Millennium Development Goals" to be achieved by 2015. Of these goals, reducing child mortality, improving maternal health, and combating HIV/AIDS, malaria and other diseases related to the health segment were included. Tribal communities in general and primitive tribal groups in particular are highly disease prone. Also they do not have required access to basic health facilities. They are most exploited, neglected, and highly vulnerable to diseases with high degree of malnutrition, morbidity and mortality.

The concerned book authored by Dr. Manoshi Das and Shri Prankrishna Banik, precisely taken the above mentioned issues aptly, for example, the First chapter dealt with the aspects of health, determinants of health, tribes and health, nutritional status of tribe, women and health etc. The imperative dimensions of a book, the review of literature in second chapter are evidence for the acumen of the authors.

The third chapter is concerned specifically on the overview of the only PVTGs of Tripura, the Reangs with intricate details, which are the discourse of the ethnography of Reangs. This chapter radiantly portrayed which is presumed to be adorable accepted by the scholars of Anthropology and other social sciences.

The comparative scenario is constantly appreciated by the scholars as the foot prints of the future research directions. The fourth Chapter of this book exquisitely dealt the Health Scenario in Tripura. It included

some statistical review of physical health infrastructure (Women and Child) over the State and National level, which unquestionably could be the ready references for the readers.

The next chapter (five) delightfully taken up the perspectives of the status of Women and Child health in Tripura based on the field survey (the strength of character of Anthropology). This chapter appositely intertwined the information regarding family background; general profile of women and their health status; women health care and practices; mother health care and practices; children health care and practices and health care facilities. Hope this chapter will find the introspection of readers' and scholars' mind.

Every book always takes the responsibility of summarization of the detailed work. The authors of the book not only recapitulated the niceties, but also provided necessary recommendations and draw conclusion as well, which would be helpful for the policy makers towards improvement of tribal health specially Primitive Tribal Women (Reang) and Child Health Care Practices.

Last but not least, this book prepared with the financial assistance from Tribal Research and Cultural Institute, Government of Tripura, will definitely found its space as hallmark and treasure of the future research along with it also opened up new horizon concerning Tribal health issues.

I wish a brilliant future of the authors along with best aspiration for the next endeavor.

Arup Ratan Bandyopadhyay, *M.Phil., PhD*
Professor and Former Head
Department of Anthropology
University of Calcutta, India

List of Tables and Figures

Tables

1.1	Some of the key health indicators of ST population	14
1.2	Early childhood mortality rates by background characteristics	15
3.1	District wise population distribution and Sex ratio of Reang	64
3.2	Reang Population in the age group of (0-6) in Tripura state	65
3.3	Main occupation of Reang under different categories	66
3.4	Marginal worker among Reang	66
3.5	Literacy rate of Reang	67
3.6	Economic status of Reang tribe	68
3.7.1	Land holding status of Reang	69
3.7.2.	Types of Land Holding	70
3.8	Jhum practicing status among Reang	71
3.9	Status of Electricity	71
3.10	Status of IAY house holders	72
3.11	Status of *pacca* building holder	72
3.12	Status of Govt. job holders	73
3.13	Status of private job holder	74
4.1	Comparative health Scenario among selected countries	76
4.2	Shortage of medical manpower	77
4.3	Some indicators related to women from NFHS-3 for some states	78
4.4	Health status of Tripura in compare to India	79
4.5	District wise allopathic medical facilities	81
4.6	District wise Homeopathic and Ayurvedic institutions	82
4.7	Total number of beds in medical institutions	83
4.8	Total number of patients treated	84
4.9	State's performance on family planning	84
4.10	Trends in maternal care indicators	87
4.11	Knowledge of contraceptive methods	88
4.12	Source of modern contraceptive methods in Rural Tripura	89
4.13	Delivery and postnatal care	90
4.14	Feeding Practices for Children	91
4.15	Early childhood mortality rates in Rural	92
4.16	Marriage & Fertility	93
4.17	Sex Ratio among Scheduled Tribes by residence	93
4.18	Food group-wise mean intake per adult consumption unit	95

5.1	Family Size	97
5.2	Mean Family size	97
5.3	Sex ratio in the study area	98
5.4	Educational Status of Respondent's family	98
5.5	Main Occupation of Respondents family	99
5.6	Economic category of respondent Family	100
5.7	Monthly income of respondent family	100
5.8	Average annual expenditure of respondent family	101
5.9	Land-holding Pattern	102
5.10	Housing type of respondents	103
5.11	Sanitation hygiene	103
5.12	Drinking water source	104
5.13	Type of cooking device	105
5.14	Using status of various housing durable	106
5.15	Major health problem of respondent family members	108
5.15.a	Temporary diseases	108
5.15.b	Chronic diseases	109
5.15.c	Disability status	110
5.15.d	Source of medicine	110
5.15.e	Treatment type	111
5.16	Age Distribution of Respondent Women	112
5.17	Educational Status of Respondent women	112
5.18	Marital Status of respondent women	113
5.19	Age at Marriage of respondent women	113
5.20	General problems faced by respondent women	114
5.21	Major diseases faced by women	115
5.22	Name of diseases faced by Women	116
5.23	Consultation with doctor for major health problem of women	117
5.24	Age at Menarche of respondent women	118
5.25	Menstruation cycle of women	119
5.26	Flowing status of menstruation cycle	119
5.27	Duration of menstruation	120
5.28	Process of cleaning Perineum	121
5.29	Types of pad using by women	121
5.30	Frequency of using pad	122
5.31	Disposal of used pad	123
5.32	Age group at first pregnancy	124
5.33	Status of child birth	125
5.34	Information of abortion	125
5.35	Problem of mother during delivery	126

5.36 Using status of contraceptive 127
5.37 Comparison of contraceptive user 127
5.38 Types of contraceptive 128
5.39 Age at menopause of women 128
5.40 Food intake status of women during menstruation 129
5.41 Food intake status of women during pregnancy 129
5.42 Physical working status during menstruation 130
5.43 Physical working status during pregnancy 131
5.44 Status of Care taken for women during pregnancy (Anti natal care) 131
5.45 Problem of women during pregnancy 132
5.46 Delivery status of women 133
5.47 Process of safe and unsafe delivery status 133
5.48 Safety precautions during delivery 134
5.49 Types of precautions 134
5.50 Practices related to cord cutting during delivery 135
5.50.aCord cut by
5.50.b Cord cutting instrument
5.50.cCord disposal place
5.51 Time taken by placenta to come out 136
5.52 Breast feeding time 137
5.53 Reason of breast feeding 137
5.54 Period of rest after delivery 138
5.55 Practices of post natal care 139
5.55.aResting place of women
5.55.b Use cotton for cleaning
5.55.cOther means of cleaning vaginal parts
5.55.d Day's for cleaning
5.56 Problems during post delivery 141
5.57 Kind of treatment 141
5.58 Post natal food intake (40 days) 142
5.59 Post-Natal physical work 144
5.60 Medical check-up after delivery 145
5.61 Immunization status of mother 146
5.62 Infant and maternal mortality rate 146
5.63 Birth place of children 147
5.64 Birth procedure of children 147
5.65 Problem of children during birth 148
5.66 Major diseases of children 148
5.67 Name of diseases faced by children 149
5.68 Consultation with doctor about children diseases 150

5.69 Number of children vaccinated (Polio) 150
5.70 Health problem of children 151
5.70.aDe-worming status 151
5.70.b Other diseases of children 152
5.71 Number of health insurance holder 153
5.72 Smart card holder family 153
5.73 Govt. Medical camp conducted in local area 154
5.74 Availability of Primary Health Centre in local place (PHC) 154
5.75 Distance of PHC from respondents' residence 155
5.76 Availability of ASHA worker in local area 155

FIGURES

2.1 Study Area 53
5.11 Sanitation Hygiene 104
5.19 Age Group at Marriage 114
5.20 General Problems Faced By Women 115
5.21 Major Diseases Faced By Women 116
5.26 Flowing Status of Menstruation Cycle 120
5.32 Age Group at First Pregnancy 125
5.34 Information of Abortion 126
5.36 Contraceptive Using Status 127
5.42 Physical Working Status During Menstruation 130
5.46 Delivery Status of Women 133
5.64 Birth Procedure of Children 148
5.68 Consultation with Doctor about Children diseases 150
5.69 Polio/Vaccination of Children 151
5.70.b Diseases of Children 152

ABBREVIATIONS

ADC	Autonomous District Council
AGMC	Agartala Government Medical College
AIDS	Acquired Immuno Deficiency Syndrome
ANC	Anti-Natal Care
ANM	Auxiliary Nurse Midwifery
APL	Above Poverty Line
ARI	Acute Respiratory Infection
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga, Unani, Siddha, and Homeopathy
BMI	Body Mass Index
BPL	Below Poverty Line
CBO	Community Based Organisation
CHC	Community Health Centre
CPR	Couple Protection Rate
CSSM	Child Survival and Safe Motherhood Programme
DAWN	Development Alternatives for Women
DLHS	District Level Household and Facility Survey
GDMO	General Duty Medical Officer
HDI	Human Development Index
HIV	Human Immuno Deficiency Virus
HMIS	Health Management Information System
IAY	Indira Awaas Yojana
IEC	Information Education & Communication
IMR	Infant Mortality Rate
IUD	Intrauterine Device
JSY	Janani Suraksha Yojana
LHV	Lady Health Visitor
MC	Menstruation Cycle
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MMR	Maternal Mortality Rate

MMU	Mobile Medical Unit
MoTA	Ministry of Tribal Affairs
MPI	Master Patient Index
NCAE	National Council for Applied Economy
NFHS	National Family Health Survey
NGO	Non- Government Organisation
NHM	National Health Mission (Before NRHM)
NHP	National Health Policy
NMR	Neonatal Mortality Rate
OPHI	Oxford Poverty and Human Development Initiative
ORGI	Office of the Registrar General & Census Commissioner
PHC	Primary Health Centre
PPP	Public Private Partnership
PTG	Primitive Tribal Group
PVTG	Particularly Vulnerable Tribal Groups
RCH	Reproductive Child Health
RDA	Recommended Daily Allowance
RTI	Reproductive Tract Infections
SHG	Self-Help Group
SRS	Sample Registration System
ST	Scheduled Tribe
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infections
TB	Tuberculosis
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
TRP & PTG	Tribal Rehabilitation in Plantation and Primitive Group Programme
TW	Tribal Welfare
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
VHSC	Village Health & Sanitation Committee
WHO	World Health Organisation

REPRODUCTIVE AND CHILD HEALTH

CARE & PRACTICES

REANG TRIBES IN TRIPURA

"Bad health is constitutive of poverty. Premature mortality, escapable morbidity, undernourishment are all manifestations of poverty. I believe that health deprivation is really the most central aspect of poverty."

Amartya Sen

1

INTRODUCTION

It is well recognized that improvement in the health status of population is both an important means of increasing productivity and economic growth as well as an end in itself. The importance of improvements in health is also acknowledged in the Millennium Development Goals of the UNDP, which calls for a dramatic reduction in poverty and improvements in health, especially of the poor. In India, with its vast majority of poor population, ensuring the good health of the people is a challenging task. To deal with this enormous challenge, the Government of India formulated the National Health Policy, 1983, which set some health-related targets to be achieved by 1985, 1990 and 2000. However, barring a few exceptions such as life expectancy, polio immunization, and crude death rate, these targets remained unachieved. It is clear that those health systems that direct their resources and energies towards the health needs of the poor have a better overall health status. This is a logical association, since the poor carry the larger burden of disease. But the facts make a maker of such logic as they establish the raw deal the poor are getting from the public health care system. A recent study by the National Council for Applied Economy reveals that the richest 20 percent enjoy three times the share of public subsidy for health compound with the poorest quintile. The poorest 20 percent of Indians have more than double the mortality rates, fertility rates and under-nutrition levels of the richest 20 percent. The poor suffer disproportionately more from pre-transition diseases such as malaria, and T.B. on an average, they spend 12 percent of their incomes on health care, as opposed to only 2 per cent spend by the rich. Treatment or hospitalization for chronic illness often means the liquidation of meagre assets, even permanent indebtedness. One episode of hospitalization is enough to wipe out all the assets of the family. It is no wonder that the number of the poor who did not seek treatment because of financial reasons increased from 15 per cent

to 24 per cent in rural areas and doubled from 10 per cent to 21 per cent in urban areas in the decade of 1986-96.

UNDERSTANDING OF HEALTH:

The English word "health" comes from the Old English word *hale*, meaning "wholeness, a being whole, sound or well," *Hale* comes from the Proto-Indo-European root *kailo*, meaning "whole, uninjured, of good omen". *Kailo* comes from the Proto-Germanic root *khalbas*, meaning "something divided". Medilexicon's medical dictionary has three definitions for health, the first being "The state of the organism when it functions optimally without evidence of disease or abnormality" (Nordqvist, 2009)

In other way, health is defined as a state of dynamic balance in which an individual's or a group's capacity to cope with all the circumstances of living is at an optimal level.

It may also defines that health is a state characterized by anatomic, physiologic, and psychological integrity, ability to perform personally valued family, work, and community roles; ability to deal with physical, biologic, psychological, and social stress; a feeling of well-being, and freedom from the risk of disease and untimely death.

The most famous modern definition of health was created during a Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." The Definition has not been amended since 1948. During the Ottawa Charter for Health Promotion in 1986, the WHO said that health is : "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities."

DIFFERENT ASPECTS TO HEALTH:

Most people accept that health can be divided into two (2) broad aspects - physical and mental health.

a. Physical health

For humans, physical health means a good body health, which is healthy because of regular physical activity (exercise), good nutrition, and adequate rest. As a country's or region's people experience improved nutrition, health care, standards of living and quality of life, their height and weight generally increase. In fact, most people, when asked for a definition of health talk about physical health. Physical health relates to anything concerning our bodies as physical entities. Physical health has been the basis for active living campaigns and the many nutrition drives that have swept the industrialized world. People are exposed to so much "physical health" data these days that it is hard to decide what is relevant and what is not.

Another term for physical health is *physical wellbeing*. Physical wellbeing is defined as something a person can achieve by developing all health-related components of his/her lifestyle. Fitness reflects a person's cardio respiratory endurance, muscular strength, flexibility, and body composition. Other contributors to physical wellbeing may include proper nutrition, bodyweight management, abstaining from drug abuse, avoiding alcohol abuse, responsible sexual behavior (sexual health), hygiene, and getting the right amount of sleep.

b. Mental health

Mental health refers to people's cognitive and emotional well-being. A person who enjoys good mental health does not have a mental disorder. According to WHO (2014), mental health is "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". No matter how many definitions people try to come up with regarding

mental health, its assessment is still a subjective one. People have always found it easier to explain what mental illness is, rather than mental health. Most people agree that mental health refers to the "absence of mental illness". For some, this definition is not enough. They argue that if you pick 100 people who do not suffer from any mental disorder or illness that could be diagnosed by a psychiatrist, some people within those 100 will be mentally healthier than others. Most people also agree that mental health includes the ability to enjoy life, the ability to bounce back from adversity, the ability to achieve balance (moderation), the ability to be flexible and adapt, the ability to feel safe and secure, and self-actualization (making the best of what you have).

DETERMINANTS OF HEALTH

The health of individual people and their communities are affected by a wide range of contributory factors. People's good or bad health is determined by their environment and situations - what is happening and what has happened to them, says WHO (2015). WHO says that the following factors probably have a bigger impact on our health than access and use of health care services:

- Where we live
- The state of our environment
- Genetics
- Our income
- Our education level
- Our relationship with friends and family

MAIN DETERMINANTS TO HEALTH

- Our economy and society *("The social and economic environment")*
- Where we live, what is physically around us *("The physical environment")*
- What we are and what we do *("The person's individual characteristics and behaviors")*

WORLD HEALTH ORGANISATION

As our good health depends on the context of our lives, praising or criticizing people for their good or bad health is wrong. Most of the factors that contribute towards our good or bad health are out of our control. According to WHO (2015), these factors (determinants), include the following, among others:

a. Socio-economic status -

The higher a person's socioeconomic status is, the more likely he/she is to enjoy good health. The link is a clear one. Socioeconomic status affects all members of the family, including newborn babies. An Australian study (Amir, 2008) found that women of lower socio-economic status are less likely to breastfeed their newborn babies - a factor which will have an impact on the health of the baby just as he/she enters the world. A South Korean study (Nordqvist, 2005) revealed a clear link between low socio-economic status and heart attack and stroke risk.

b. Education -

People with lower levels of education generally have a higher risk of experiencing poorer health. Their levels of stress will most likely be higher, compared to people with higher academic qualifications. A person with a high level of education will probably have higher self-esteem. A study (Baker. et. al, 2007) carried out by researchers at Northwestern University Feinberg School of Medicine,

Chicago; found that elderly people who had a higher level of health literacy were more likely to live longer. Another study (Tokar, 2006) from San Francisco VA Medical Center found that Literacy at less than a ninth-grade level almost doubles the five-year risk of mortality among elderly people.

c. Physical environment -

If your water is clean and safe, the air you breathe is pure, your workplace is healthy, your house is comfortable and safe, you are more likely to enjoy good health compared to somebody whose water supply is not clean and safe, the air he/she breathes is contaminated, the workplace is unhealthy, etc. A study (Randerson, 2008) carried out by researchers at Zuyd University, The Netherlands, found that just an hour of sniffing car exhaust fumes induces a stress response in the brain's activity. Another study (Filippelli, 2008) carried out at Indiana University-Purdue University found that chronic lead poisoning, caused in part by the ingestion of contaminated dirt, affects hundreds of thousands more children in the United States than the acute lead poisoning associated with imported toys or jewelry.

d. Job prospects and employment conditions -

If you have a job, statistics show you are more likely to enjoy better health than people who are unemployed. If you have some control over your working conditions your health will benefit too. A study (Nordqvist, 2015) by researchers at State University of New York at Albany found that workers who lost their job through no fault of their own were twice as likely as continuously employed workers to report over the next 18 months that they developed a new illness, such as high blood pressure, diabetes or heart disease.

e. Support from people around you -

If you have family support, as well as support from friends and your community your chances of enjoying good health are far greater than somebody who has none of these things. A study (Nauert,

2009) carried out at the University of Washington found that strong family support, not peer support, is protective in reducing future suicidal behavior among young adults when they have experienced depression or have attempted suicide.

f. Culture -

The traditions and customs of a society and how a family responds to them play an important role in people's health. The impact could be either good or bad for health. The tradition of genital mutilation of women has an impact on infection rates and the mental health of millions of girls and women in many countries. A study (PHYS. ORG, 2008) published in the Journal of Epidemiology and Community Health found that when young people, who dress according to the customs of their own ethnic group, they may be less likely to have mental health problems later in life.

g. Genetic inheritance -

People's longevity, general health, and propensity to certain diseases are partly determined by their genetic makeup. Researchers from Vrije Universities, Holland, the Medical College of Georgia, USA, and Duke University, USA showed (Baby Steps Psychology Magazine, 2015) that people's genes play a key role in how they respond both biologically and psychologically to stress in their environment.

h. What we do and how we manage -

What we eat, our physical activity, whether or not we smoke or drink or take drugs, and how we cope with stress play an important role on our physical and mental well-being.

i. Access and use of health services -

A society that has access and uses good quality health services is more likely to enjoy better health than one that doesn't. For example, developed countries that have universal health care services have longer

life expectancies for their people compared to developed countries that don't.

j. Gender -

Men and women are susceptible to some different diseases, conditions and physical experiences, which play a role in our general health. For example, childbirth, ovarian cancer, and cervical cancer, are experienced only by women, while prostate cancer, testicular cancer are only experienced by men. During wars more men than women tend to be called up to fight, and subsequently become injured or die. Adult women are more likely to be the physical victims of domestic abuse, compared to adult men. In some societies women are not given the same access to education as men - education is a factor that influences health. Many studies have revealed gender disparities in healthcare services, even in developed countries.

The obvious and most important reason is that for a state that promises universal health care through the public health system. India has one of the lowest health budgets in the world. The state's role in health has fallen well short of its declared intentions. Not only has it failed to provide health care to the majority of the population through the public sector, it has also countenanced a large and thriving private sector to grow practically without regulation. In the context of a public health system that does not deliver services to those who need them, the private sector has from to be the main provider of curative health care. Thus, deprivation and vulnerability make the poor ill more easily, and illness makes them ever poorer and marginalized.

TRIBES AND HEALTH

The Constitution of India gives recognition to a category of people designated as the Scheduled Tribes and makes special provisions for their political representation and their economic and social welfare.

According to Oxford Dictionary "A tribe is a group of people in a primitive or barbarious stage of development acknowledging the authority of a chief and usually regarding themselves as having a common ancestor".

Meaning of TRIBE

- a social division of (usually preliterate) people
- a federation (as of American Indians)
- (biology) a taxonomic category between a genus and a subfamily
- group of people related by blood or marriage

India has the largest concentration of tribal communities in the world except that in Africa. The tribal groups of India are known to be the autochthonous people of the land. They form 8.08 percent of the total population of India. Hence small they are playing a vital role in shaping the destiny of the country. About 104.3 million /10.43 crore persons were enumerated in the country as members of the scheduled tribes (Census of India 2011). These tribal groups inhabit widely varying ecological and geo-climatic conditions (hilly, forest, valley regions etc.) in different concentration throughout the country and are distinct biological isolates with characteristic cultural and socio-economical background. Although there groups are homogeneous, culturally firm and have developed strong magico-religions health care system and they wish to survive with a livelihood of their own style. Due to remoteness and isolation the 75 primitive tribal communities have been identified by Government of India in 15 states/ Union Territories for taking up special socio-economic development programmes.

About 71 percent of India's total tribal population is concentrated in six major states, namely Madhya Pradesh (15.4 million), Maharashtra (7.3 million), Orissa (7.0 million), Bihar (6.6 million), Gujarat (6.2 million) and Rajasthan (5.5 million). In Assam and Meghalaya, total tribal population was reported to be 2.87 million and 1.52 million respectively. Belonging to over 550 communities, though only 427 are officially recognized and forming 227 ethnic groups. In Assam Barri Kachari, Mikir (Karbi) Lalung, Rasha, Dimisha, Himar Haong etc. and in Meghalaya Garo, Khasi and Jayantiya tribes are residing.

Long before the advent of the British, the indigenous people in the hills of north-east India had organized themselves under the society systems of their own which had been the natural outcome of the emergence of their society. Two distinctively different types of system of governance had been evolved in the hill that is democratic system in the clan-based and autocratic system of chieftainship controlling by the clan or village headmen. In certain communities these traditional institutions were well organized and well structured and even in few cases, they led the formation of miniature states, in few communities these institutions were loosely organized without any central authority.

The concept of health, disease, treatment, life and death among the tribes is as varied as their culture. Tribal society is guided by traditionally laid down customs to which every member is expected to conform. The fate of the individual and community depends on their relationship with unseen forces which intervene in human affairs. If men offend them, the mystical powers punish by causing sickness, death of other natural calamities. In tribal society, disease is seen to be caused by the breach of some taboo or by hostile spirits, the ghosts of the dead. (Basu. et. al, 1994).

Tribal are strong believers in the natural theory of diseases. According to them, human life is governed by the sun, rain, winter and other elements and when man falls out of harmony with nature, he becomes susceptible to disease and accidents.

They believe in the existence of benevolent and malevolent spirits, the former playing a protective role, while the latter are considered to be responsible for causing disease and epidemics. Magico-religious practices are resorted to for the treatment of disease. Hence, the first step is to restore the balance and harmony with nature through rituals. Among Khasis and Jaintias tribal population for instance, there exists a scientific theory of disease which to them is as natural as the theory that infections are caused by bacteria.

The health problems and practices of any community are profoundly influenced by interplay of social, economic and political

factors. The common beliefs customs and practices connected with health and disease have been found to be intimately related to the treatment to disease. It is necessary to take a holistic view of all the cultural dimensions of the health of the community and to relate such a holistic perspective to the overall culture of the concerned community (Singh,1994). The health status needs special attention in the context of tribal communities of India. Tribal populations have distinctive problems, not because that they have special kind of health, but because of special placement in difficult areas and circumstances in which they live. The health nutrition and medico-genetic problems of diverse tribal groups inhabiting widely varying geo-climatic and ecological conditions have been found to be unique and present a formidable challenge for which appropriate solution have to be found by planning and evolving relevant research studies which should be need based and problems solving in nature (Basu, 1994).

Lack of personal hygiene, health-education and ignorance of developmental policies are the main factors responsible for their ill health. Some of the main factors of poor health as indicated by earlier investigations include – (a) Endemic disease like malaria tuberculosis, influenza, dysentery, high infant mortality and maldisease introduced from malnutrition, (b) Venereal disease, included abortion, inbreeding, addition to opium, custom of eating tubers of 'DIOSCERA' (may cause sterility as they contain substances used on Oral contraception), and (c) Sex ratio leading to shortage of women.

There is a general agreement that the health status of the tribal population in India is very poor. Different studies Like Basu S.K. et al. (1986,89,90), Bardhan A., (1989), Roy Burman B.K. – (1986,90), Swain S. et al. (– 1990), Mukherjee B.M. (– 1990), Sen J. et al. (– 1986), Mahapatria L.K. et al. (– 1990), Rizvi S.N.H. (– 1986), Mukherjee D.P. (– 1986), Haq M. (– 1990), Chowdhuri M.K. et al. (– 1886 etc.) have tried to establish this with the help of morbidity, mortality and health statistics.

The widespread poverty, illiteracy, malnutrition, absence of safe drinking water and sanitary living conditions, poor maternal and child health services, ineffective coverage of nation health and nutritional

services, have been traced out in several studies as possible contributing factors for dismal health conditions prevailing among these vulnerable populations.

In many parts of India tribal population suffers from chronic infections and diseases out of which water borne diseases are life threatening. They also suffer from deficiency diseases. The Himalayan tribes suffer from goiter due to lack of iodine. Leprosy and tuberculosis are also common among them. Infant mortality was found to be very high among some of the tribes. Malnutrition is common and has affected the general health of the tribal children as it lowers the ability to resist infection, leads to chronic illness and sometimes leads to brain impairment. The ecological imbalance like cutting of trees have increased the distances between villages and the forest areas thus forcing tribal women to walk longer distances in search of forest produce and firewood.

According to the National Family Health Survey (2005-06), some of the key health indicators of ST population in the country are showed below:

Table 1.1. : Some of the key health indicators of ST population

Indicators	ST	Total
Infant Mortality Rate (IMR)	62.1	57.0
Pre-natal Mortality	40.6	48.5
Neo-natal Mortality	39.9	39.0
Post-natal Mortality	22.3	18.0
Child Mortality	35.8	18.4
Under five Mortality	95.7	74.3
Ante-Natal Check-up	70.5	77.1
Percentage Of Institutional Deliveries	17.7	38.1
Percentage of any anemia in women	68.5	55.3
Childhood vaccination (full immunization)	31.3	43.5
% households covered by a health scheme/ insurance	2.6	31.9

Source: National Family Health Survey (NFHS) 2005-06

Infant mortality defined as the infant deaths (less than one year) per thousand live births. Reflects in Table 1.1, IMR was reported 57 at the national level and incase of STs it was 62.1 which was increased. Pre natal mortality was 48.5 at National level, which was recorded 40.6 incase of STs. Neo- natal deaths refers to the deaths of infants less than 29 days of age. The percentage of neo- natal deaths to total infant deaths was 39.9 whereas the total percentage is less (39.0). In case of under five mortality rate (95.7) the condition of ST was not good.

Table- 1.2: Early childhood Mortality rates by background characteristics
(Figures per 1000 live births)

Background Characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)	Infant mortality	Child mortality	Under-five mortality
Urban					
ST	29	14.8	43.8	10.4	53.8
Total	28.5	13	41.5	10.6	51.7
Rural					
ST	40.9	23	63.9	38.3	99.8
Total	42.5	19.7	62.2	21	82
Total					
ST	39.9	22.3	62.1	35.8	95.7
Total	39	18	57	18.4	74.3

Source: NFHS-3 2005-06, M/o Health & Family Welfare, GOI

NUTRITIONAL STATUS OF TRIBES

The health and nutrition problems of the vast tribal population of India are as varied as the tribal groups themselves who present a bewildering diversity and variety in their socio-economic, socio-cultural and ecological settings. The malnutrition is high among the tribal population. Nutritional deficiency leads to diseases like endemic goiter (thyroid gland), anemia, pellagra and beriberi, deficiency disease occurring when the human body has insufficient amounts of thiamine (vitamin B_1). The deficiency may result from improper diet (e.g. Nutritional anaemia is a major problem for women in India and more so in the rural and tribal belt. This is particularly serious in view of the fact that both rural and tribal women have heavy workload and anaemia has profound effect on psychological and physical health. Anaemia lowers resistance to fatigue, affects working capacity under

conditions of stress and increases susceptibility to other diseases. Maternal malnutrition is quite common among the tribal women especially those who have many pregnancies too closely spaced. Tribal diets are generally grossly deficient in calcium, vitamin A, vitamin C, riboflavin and animal protein.

National Family Health Survey (NFHS-2) found that in almost all the states of India, tribal households had a higher incidence of childhood stunting (52.3%) than non-tribal households (42.8%). An anaemia prevalence of more than 80% was found among tribal children (Mishra, 2005). Several studies have also reported deficient intake of calories and protein among tribal populations relative to the Indian RDA, which may be an explanation for the high rates of stunting among this group (Rao et al., 1994). Iron deficiency is recognized as the major cause of anemia in tribal communities (Reddy et al., 1995) and several studies have reported that deficiencies of micronutrients such as iron and zinc often occur together. Hence the high rates of anemia among tribal populations provide additional evidence of the possibility of marginal zinc deficiency in tribal areas. This is further supported by the high prevalence of stunting and the highly deficient dietary energy intakes in the tribal populations since intake of both zinc and iron are known to be highly correlated with dietary energy intake (Willett, 1998). At least one study has shown that zinc intake of populations in tribal regions was significantly lower than that of any of the other regions studied (Agte et al., 2005). Tribal populations still largely depend on agriculture and forest products for their livelihood and they follow a relatively homogenous lifestyle with their food habits, dietary practices and general pattern of living (Patwardhan, 2000). Most tribes still rely on their indigenous foods, which usually consist of wild unconventional forest products although some cultivate grains and other farm products for subsistence (Singh and Arora, 1978). The most frequently used cereals are maize, millet or rice and these form part of a major meal at least once daily (Kapil et al., 2003). Earlier studies indicated that, comparatively, the overall health of the tribal population is inferior to that of people elsewhere in India and that poor environmental sanitation and unhygienic personal practices predispose tribal populations to high risk of infection (Nagda, 2004 and Mishra,

2005). Findings from a recent national survey showed that 82.4 of tribal households did not have latrines and 78.1 did not have drainage facilities in their homes (NFHS-2, 1998), a situation that predisposes children to diarrhoeal disease. The survey also found that the prevalence of diarrhoea and acute respiratory infection (ARI) was higher among tribal children than children of non-tribal mothers. Similarly, the study by Nagda (2004) suggested that childhood diarrhoea, ARI, anemia and fever were major causes of infant mortality in tribal areas.

India's abysmal track record at ensuring basic levels of nutrition is the greatest contributor to its poverty as measured by the new international Multi-dimensional Poverty Index (MPI). About 645 million people or 55 percent of India's population is poor as measured by this composite indicator made up of ten markers of education, health and standard of living achievement levels.

Developed by the Oxford Poverty and Human Development Initiative (OPHI) for the United Nations Development Programmes (UNDP) forthcoming 2010 Human Development Report, the MPI attempts to capture more than just income poverty at the household level. It is composed of ten indicators: years of schooling and child enrollment (education); child mortality and nutrition (health); and electricity, flooring, drinking water, sanitation, cooking fuel and assets (standard of living). Each education and health indicator has a 1/6 weight, each standard of living indicator a 1/18 weight.

The new data also shows that even in states generally perceived as prosperous such as Haryana, Gujarat and Karnataka, more than 40 percent of the population is poor by the new composite measure, while Kerala is the only state in which the poor constitute less than 20 percent. The MPI measures both the incidence of poverty and its intensity. A person is defined as poor if he or she is deprived on at least 3 of the 10 indicators. By this definition, 55 percent of Indian was poor, close to double India's much-criticized official poverty figure of 29 percent. Almost 20 percent of Indians are deprived on 6 of the 10 indicators.

Nutritional deprivation is overwhelmingly the largest factor in overall poverty, unsurprising given that half of all children in India are under-nourished according to the National Family Health Survey -3 (2005-06). Close to 40 percent of those who are defined as poor are also nutritionally deprived. In fact, the contribution of nutrition to the overall MPI is even greater in urban than rural India.

Multi-dimensional poverty is highest (81.4% poor) among Scheduled Tribes within India's Hindu population, followed by Scheduled Castes (65.8%), Other Backward Class (58.3%) and finally the general population (33.3%).

WOMEN AND HEALTH

In India, women are very vulnerable to health risks at every stage of their lives- from conception to old age-such as maternal deaths, anemia, tuberculosis, work related health risks and violence on them. All these are clearly linked to poverty, economic dependence, lack of decision-making opportunities, appropriate health services, limited access to information and so on.

In discussing women's health it is seldom realized that women are exposed in the same way as men when the discussion is about prevalent common diseases in India. However they get attention much later than men, if at all they do, and they are likely to be treated at home rather than by a doctor or at a medical centre, women are more likely to face serious consequences including death. Moreover, for example because women are different as a result of their biological and physiological make-up anemia is more prevalent in women and blood depleting diseases like malaria, affect women's health more. Furthermore, health needs are influenced by socio-political and economic conditions within specific cultural settings. This is why any discussion on the health of women has to take into consideration the hierarchical and patriarchal nature of the society. Until recently, women's health needs in official policies has only taken into account mainly their role as producers of children, such as maternal and child health is included in the health services.

Then again, segregated and asymmetrical gender relations are present not only in discriminatory treatment method out to daughters in the family but they are strengthened by the marriage practices. Marriage as a social institution is seen as an alliance of patrilineal kin groups, so that early marriage to a man senior in age, practice of village exogamy and patrilineal residence upon marriage ensure that women submit to fulfilling traditional gender roles. Under such situations, women's problems are defined in terms of family needs rather than their own unequal access to health resources.

The neglect of women's health needs has continued in spite of the fact that time and again, several committees have looked into the health conditions in India and have recommended policies for modifications and improvements in the health care system. These reports have pointed out that health services are inadequate to cater to the needs of the large sections of the rural and urban poor as the biases are in favour of the rich and the geographic and cultural needs of the people are not taken into account, especially the requirements of the women. The way the family planning programme has been functioning, it has not helped improving the health of women. It does not focus on the regulation of fertility since women bear a heavy burden due to their role in reproduction. There is an urgent need to reduce medicalization of the women's bodies and to empower them to get control over bodies and their sexuality, as against the facts that the programme is more interested in promoting the interests of the pharmaceutical industry by introducing newer methods even when they are harmful to the health of women. (Karkal, 1995)

Population control programmes talk of environmental degradation and poverty. Women are rarely causes of environmental degradation, but they are certainly their victims. Shortages of water, fuel and fodder are known to increase women's work load. Being protectors of health of the family as well as being health workers, women face additional burdens of these problems. It is also clear that poverty cannot be abolished by the capitalist system since it is actually produced and perpetuated by the very logic of its functioning. It is for this reason that DAWN's (Development Alternatives for Women) New

Era says: "While traditional gender based system of subordination have been considerably transformed by the forces of economic growth, commercialization and market expansion, subordination itself persists, although in some case more impersonal forces in the labour market replace the direct control of women within the patriarchal rural households. We must understand the impact of these processes on women's relative access to resources, income and employment, as well as sexual division of labour. The almost uniform conclusion of the research is that, with a few exceptions, women's relative access to economic resources, incomes and employment has worsened, their burdens of work have increased and their relative and even absolute health, nutritional and educational status has declined."

At the root of the population problem- both qualitative as well as quantitative- is the status of women requires not only looking at the health conditions, generally discussed by the health professionals but also involves in large part, re- examining sexuality with social and cultural mores and therefore, hierarchical and patriarchal nature of the society. It entails improving male, as well as adolescent sexual health and more importantly, involving men in the health programmes. In short, securing women's health is the crucial means for bringing about social transformation.

Health conditions of women are closely linked with the conditions of poverty, their family structure that restrains them from availing of the health services, as well as accepting healthier life styles and the political power that empowers them for equal share in the social resources. It is clear that the importance of the social context has to be taken into account. To illustrate, in 1974, at the International Population Conference the key to improving women's health was advocated to be increasing CPR (Couple Protection Rate- through contraception), in 1994 at their conference20 years later, the key was ensuring women's health and their economic well being through their empowerment and their rights over their bodies and their sexuality. (Karkal, ibid)

It may be noted critically that traditional and folk systems of health care which are the mainstay of medical support to thousands of

poor people in remote rural areas, have not been seriously promoted and much structural support has not been given by the government to traditional mainstreams of medical care. In recent times, globalization is affecting lives of millions of women and children adversely, because medicalization issues are becoming very expensive. It is causing economic dependency and thereby creating unsustainable health problems.

Furthermore, while knowledge on diseases is available, the gaps that exist between knowledge and information with regard to health awareness of the public are very wide indeed. Most likely, low literacy levels within a multi-lingual society requires the task of health requirements to be culture sensitive and gender sensitive in the process of health education. Therefore, the interventions of education are necessary. This is a problem of communication that requires the capacity to listen to the voiceless. In the absence of such an approach, medical solutions are becoming as a consequence increasingly costlier; dependency creating unsustainable medical solutions that are being promoted by multi-nationals and others, for health problems of women whereby there is an imposition of alien models on many indigenous cultures.

It is clear that in order to deal with the magnitude of diverse health problems, all reductionist approaches have to be avoided, since these are based on a mechanical and fragmentary approach that is a hangover of out dated paradigms. Health is not a mere bio-medical treatment of the individual. In a holistic approach it needs to be addressed comprehensively at multiple levels. This means that the existing wisdom experience of the non-literate and the systems of medicine in use since thousands of years has to be kept in mind when approaching health problems. This requires a multi-pronged strategy in terms of planning, designing programmes for the elimination of diseases (the etymologically roots of which means 'not at ease), i.e. making it imperative to correct cultural, psychological and mental problems beyond the mere diagnosis of the bio-physical symptoms of the specific disease.

In other words, gender specific health problems need to be understood in their total context and not merely as a problem of

reproductive health. The health worker him/herself and those at the top need to approach their own leaves from this view point if results are to be produced at a deeper level that is lasting. The vulnerability of women to various diseases even during their reproductive needs requires a critical notice, and not merely to be confined to addressing contraception, safe child birth and safe abortion. All this is connected to the larger concerns of women in this context namely infertility, childlessness and a high incidence of low birth weight babies, high neo-natal mortality and high maternal mortality. This is the only way to counteract such health care practices that have become unethical and exploitive because of the increasing commercialization of health services as a commodity of trade-an area in this sense being socially unhealthy. It therefore, urgently requires social control, regulation and accountability.

The marginalization of women and their health concerns has been a major focus of the women's movement in India that includes activists and NGO's who are intensively agitated by the neglect of women's health, specifically as a gender issue. They have independently addressed this issue in the course of their work. However, until now the attention has largely been on their reproductive role, contraceptive responsibilities of women; all this mainly for population control. But this approach ignores other dimensions of women's health, as mentioned above, the gender perspective that is conspicuously absent in the formulation of specific policies and programmes that have hitherto not shown the links between women's education, social and economic status on the one side and their nutritional and health status associated with their morbidity and mortality on the other. (Gopalan and Shiva, 2000)

However, it may be mentioned here that the Women Health Development Cell of WHO has taken the initiative to highlight women's health concerns in their global agenda. Their goal is to prepare regional and national profiles of women's health and development in order to identify the current status of women's health and specific areas requiring focus. In this way it is hoped that this exercise highlights the linkages between investment decisions of governments and the repercussions

of these decisions on different strata of men and women in different socio-cultural situations. The basic idea is to develop parameters to monitor health status of women within countries and between countries.

Relevance of the Study

Health is a pre-requisite for human development and is essentially concerned with the well being of the common man. Health is a normal function of the body, and not only it is medical care, but an overall integrated development of the society – cultural, economic, education, social and political-administration. The health status of a society is intimately related to its value system, its philosophical cultural traditions and its social, economic and the political organizations. Therefore, an integrated approach is called for the raising the living standards and improving health status of the community. Since Tribal people constitute a significant proportion in population of India. But the cultural pattern varies from tribe to tribe and region to region. Moreover, cultural settings, eco-systems, magico-religious beliefs and treatment etc. influence tribal health and health seeking behaviour. The study of health culture of a particular community is important because (a) the health problems and the procedure to handle such problems and other health practices are influenced by the complex interplay of social factors and (b) implementation of health services would be difficult without the knowledge of the community's traditional health culture. Most of the studies are sporadic and fragmented in nature. In view of the paucity of comprehensive health related studies among the tribals of India. There is an urgent need for initiating a comprehensive study on tribal health in the changing scenario. Against this backdrop, the present study has been conducted to observe the dynamics of health care practices and the prevalent diseases of tribal community in the eco-system of Assam and Meghalaya. The study may be of immense significance for the policy imperatives and administering the health programmes in tribal concentrated areas.

2

Literature Review

Carastairs (1955) in his study pointed out that the differences between the points of view of the physicians and the village folk with regard to the theory of etiology, techniques of curing and conceptions of roles of the physicians, resulted in misunderstanding between himself, a physician and the client.

Marriott (1955) conducted study on village Kishan Garhi in Aligarh district of Uttar Pradesh. This study tries to explore the problems of introducing western medicine in Indian village community. Marriott has shown how the contracts and conflicts between the roles assumed by the indigenous and western medicinal practitioners resulted in obstacles to the acceptability of western medicine.

Elwin (1955) described the role of the Shaman among the Hill Saora of Orissa. The Shaman is one of the most important figures among the tribe. To the sick and lonely the Shaman is the nurse, friend, the guide, the analyst and the angel of strength and consolation.

Lewis (1958) noted that the advantage in learning about the indigenous beliefs and practices of the community is the insight they give into the world view of the people as concepts of disease causation are part of society's total world view, which is also reflected in other spheres such as agriculture, politics and inter-personal relations.

Dave (1960) conducted study on Garasia, which revealed that, Garasia, like other tribal communities, have faith in indigenous herbs found in the forest around their habitat. In case of ailment, an elderly Garasia, who is known to have knowledge of various herbs, is consulted.

Opler (1963) lists the following as the most commonly

believed causes of various diseases: (1) malfunctioning or imbalance of the three humans (Doshas) (2) faulty diet (3) lack of harmony with the supernatural world (4) activities of ghosts and witches (5) displeasure of deities (6) imbalance of forces which control health and (7) inappropriate behaviour in physical, social and economic matters.

Fuchs (1964) mentioned two types of medicine men - Jarka, who works through divination and Barwa, who works by calling to his aid a superhuman force. They and the villagers among whom they practice their art have a common faith in the techniques used.

Hasan (1967) distinguishes between two types of social and cultural factors that affect the health of any community; (a) factors that directly affect the health of the community because certain customs, practices, beliefs, values and religious taboos etc. create an environment that helps in the spread or control of certain disease and (b) factors that indirectly affect the health of the community as they are related to the problem of medical care to the sick and the invalid. A physician, who does not try to understand that cultural and intellectual level of the people and does not develop respect for cultural differences, proves to be a less successful practitioner in the village. If scientific medicine is to be carried to rural areas, it is necessary for medical practitioners and public health workers to acquire adequate knowledge of the general concepts of culture and social organisation of that community.

Jaggi (1973) have discussed how the nature of treatment varies with the type of cause identified. For example, religious rites occupy a prominent place in the treatment of diseases, which are associated with supernatural causes to the exclusion of other factors.

A study on 'Tribal Health Programme' in Maharashtra was conducted (1982) by John Kuriyan. The study focussed on health in a selected cluster of villages, namely Peint Block. Detailed information on nutrition, food consumption expenditure, land holdings, family size and diseases was collected. Findings of this

study is an integrated and holistic approach which link aspects of land holdings, production, income, family size, consumption, nutrition and health. According to their study report, health problem was an integrated aspect of tribal life. A model was evolved which related (1) land, (2) production, (3) income, (4) family size, (5) consumption, (6) nutrition, and (7) health. This interacts with the ecological model in which (a) poor health levels, (b) the level of infectious viruses and bacteria, (c) poor sanitary conditions and personal hygiene form a vicious circle. It was found that 9.0.17 per cent of the people fall under the subsistency line in terms of the per capita income needed to generate a level of expenditure on food, which would meet basic nutritional levels. Nearly 87 per cent of the sample households spend more than 85 per cent of their income on food. But the nutritional standards are appalling. Nearly 67 per cent of the sample population suffered from calorie deficiency. About 24 per cent of the sample population suffered from protein deficiency. The normal diet of the tribals consists mainly of Nagli. It may sometimes be accompanied by rice and tur/urid dal. Vegetables are eaten seasonally. Consumption of eggs, meat, fish and milk is negligible. About 29 per cent of the villages have acute water problem, all the year round. Only 15 per cent of the wells are perennial. 54 per cent of the people suffer from amoebiasis, worms, dysentery, diarrhoea, scabies and other skin infections. Over 60 per cent of the villages, covering 54 per cent of the population, are not connected by pucca roads.

Banerji (1982) discussed an unequal access to the health services between the social classes, the privileged and underprivileged and between rural and urban areas in the country. He pointed out that the frequent realization to take action to meet the health services need of the poor and to entrust "Peoples health in People's hand" indicates conceptual watershed to some significance in health services development in the country as this showed subordination of medical technology to the needs of the health.

Mann and Mann (1986) have observed that among Hakkipikki, a tribe of trappers and sellers in Karnataka is engrossed in the clutches of animistic beliefs. Damaging role of spirits, to health, is widely recognized. Supernaturals, for good and bad, are identified

and the relevant treatment managed for. In addition to almost conditioning of social organisation by religion purview, the areas of health, both of individual and public are also experienced and explained in the deep realm of religious forces. They also have taboos and superstitions. Mann and Mann (1986) have mentioned that religion has an important place in tribal life. Various ingredients of tribal religion such as the gods, goddesses, spirits, ghosts, other allied and the associated rites and rituals react to diverse aspects of life including diseases, sickness and their cures. Mann and Mann (1986) have also mentioned that among tribes of western India, ill-health and cure practices are based on supernatural considerations. A strong feeling of the Bhil society is that the evil spirits haunt the recesses of the atmosphere and inflict harm to persons by causing various ailments and otherwise too. Mann et al (1986) through their field work experiences among the diverse categories of Indian tribes reveal that the inter play of spirit and man, with special reference to health, is of a far greater order among the tribals than one reported in case of the non-tribal rural communities.

Basu et al (1989), in their study on the Bastar tribal groups of Madhya Pradesh estimated the average life expectancy at birth based on 95 values of Muria- males 37.56 years, females 40.07; Maria - males 40.26 years, females 41.00 years; Bhatra - males 38.6 years, females 45.30 years and Halba - males 38.6 years and females 41.46 years; and as 41.1 years for all the four tribal groups combined. Although these figures are comparable to the rural non-tribal population of Madhya Pradesh, they were far below the average life expectancy at birth of 58.6 years for the Indian population at that time. Sex specific differentials were observed with males experiencing higher mortality than females. The differences can only be attributed to the prevailing socio-economic, cultural and health care practices of the four tribal groups.

Chakravorty and Singhrol (1989) pointed out that indigenous medical system among tribes of Bastar could be divided into two groups namely ritual and herbal medicine. The tribal people are specialist in identifying, propitiating or controlling the evil-eyes which are generally believed by them to be the fundamental cause of most

of the diseases. Diseases are also caused by unsatisfied souls of dead ancestors and names of dead persons are given to the grandchildren to convince the souls that they are remembered. They perform rituals, prayers and offerings to the deity. During seasonal festivals connected with economic life they perform dances and music to ward off diseases and natural calamities. In the second category of medicine-man are the herbalists who do not enchant mantras, though they use. Such herbalists are trained by their fathers and practice or familiar profession.

In Bastar District (Basu and Kshatriya, 1989) it was observed that maternal and child-care was largely neglected. Expectant mothers to a large extent are not inculcated against tetanus. From the inception of pregnancy to its termination, no specific nutritious diet is consumed by women. The consumption of iron, calcium and vitamins during pregnancy is poor. More than 90 percent of deliveries are conducted at home, attended by elderly ladies of the household. No specific precautions are observed at the time of conducting deliveries, which result in an increased susceptibility to various infections. Services of para-medical staff are secured only in difficult labour cases. It has been observed that a specially prepared concoction from various kinds of herbs known as 'Kasa Pani' is provided to mother on the third day after delivery, 'Kasa Pani' is a herbal medicine which according to them gives soothing effect, helps in recovering the depleting energy and also acts as anti-ineffective. Maternal mortality directly related to pregnancy and child-birth has been found to be appreciably high among the tribal populations of Bastar district. In addition, a lot of females suffer from ill health due to pregnancy and child-birth in the absence of well defined concept of health consciousness.

Mahapatra (1990) analysed the Santhal view of health and sickness, disease and death and also discussed the nature of linkage between traditional medicine and modern system of medicine and also the mechanism of exorcisms, spirit healing and medicine preparation. It has been observed that poor health status reflected in tribal health care practices is the outcome of their ecological, social and living conditions, illiteracy, and ignorance, under availability of potable water and

inappropriate medical and health opportunities. Indigenous and modern health care system of practices continues to be antagonistic to each other. A brief review on the available health indicators on various tribal population groups and their implications in health care is provided. There is a general agreement that health status of the tribal population in India is very poor. Different studies, (Basu, 1986, 1990; Chowdhuri et al, 1986; Mukherjee, 1986, 1990; Rizvi, 1986; Sen et al, 1986; Haque, 1990; Mahapatra et al, 1990; Swain et al, 1990) have tried to establish this with the help of morbidity, mortality and health statistics. The widespread poverty, illiteracy, malnutrition, absence of safe drinking water and sanitary and living conditions, poor maternal and child health services, ineffective coverage of national health and nutritional services, have been traced out in several studies as possible contributing factors for dismal health conditions prevailing among these vulnerable populations (Bhasin, 1990)

Ali (1992) conducted study on tribal communities of Orissa. He found that an ecological imbalance caused by rapid deforestation has resulted not only in depleting food resources, but in prolonged droughts, complimenting to hunger and starvation.

Pacholi (1993) in his study on Bastar tribe of Madhya Pradesh found that tribal areas of Madhya Pradesh are the permanent source of malaria. Her study revealed that tribals blindly follow the local magic-man or the witch-doctor by different names such as "Ladwa', 'Joshi-Panda' or 'Gunia' in different parts of MP. The witch-doctor treats different diseases.

Crude Death Rate varies from a minimum of 9 in Hill Korwas (Pandey, 1993) to a maximum of 25 in Oraons of Bihar (Parsuram et al, 1990). Data reflect a large range in Crude Death Rate. This could be due to investigations being carried out in different years and in different geo-climatic tribal habitat and also due to inadequate systematic, well designed study. Nevertheless, a very low rate of rural tribal female literacy could be one of the major attributable factors for a high Crude Birth Rate and Crude Death Rate in all the tribal populations besides other social, cultural, economical and technological factors.

Pandey and Tiwari (1993) carried out their studies on Hill Korwas of Madhya Pradesh. Of the 14 women, who were pregnant at the time of interview, only one had consulted ANM during her pregnancy. Only five seemed to know about tetanus toxoid injections and intake of iron tablets during pregnancy. Most of the deliveries were conducted by untrained dais or traditional birth attendants (72 per cent) followed by elderly ladies (92.3 per cent) and less than one per cent was conducted by trained dais and the ANM. The cord was cut with a bamboo piece for a male child and with a knife for female child. The colostrum was not discarded. Goat milk was given as a substitute for mother's milk.

Basu et al. (1994) conducted study on the perception of health and pattern of health seeking behaviour among the selected tribal population groups of Madhya Pradesh (Gonds, Muria, Madia, Abhuj Madia, Dhurva, Darla, Halbas and Bhattras) and Orissa (Kutia Kondhs and Kharias). The study revealed dismal picture on health status in terms of health seeking behaviour. It is attributed to social and living conditions, lack of competitive economy, malnutrition, illiteracy, ignorance, superstitions, improper and poor sanitation, unsafe drinking water, unawareness of health education, under utilization of health resources, cultural lag, poorly developed mass media, poor medical and health opportunities (variety, quality and quantity of health services) and infrastructure. It was also observed that there was great difficulty in persuading the tribal people to come to avail modern medical treatment because they have firm, rigid and well-developed system of primitive medicine. They seek remedies through magico-religious practices to propitiate the supernatural powers. Basu et al. (1994) studied the health seeking and health utilization pattern of Kutia Kondhs of Phulbani district, Orissa. The study revealed that "Jani" (the traditional healer) is the first person to be contacted in case of sickness. Kutia Kondhs consider modern medicine to be the last resort for seeking medical care and health care. The major reasons for low utilization of modern medicine were the distant location of health care facilities, rough and hilly difficult terrain, poor economic condition, character and illiteracy, non-availability of medicines even from the health care institution etc. besides inflicting loss in terms of valuable working time for the activities related to livelihood.

Sachchidananda (1994) pointed out that a pre-requisite to the success of any health programme in the tribal areas was to orient the doctors and all paramedical staff working in tribal areas to their life and culture so that they are able to communicate with the people on their own wavelength and to establish rapport with and in still confidence among the them.

Although the concept of well being and the notion of the disease varies between different tribal groups, yet, in tribal habitat, a person is usually considered to be afflicted with some disease if he/she is incapable of doing the routine work which is usually being expected to be carried out by that individual in the society, i.e., incapacitation from work is the universal index of poor health. Thus the concept of ill health becomes a functional one and not clinical (Bhasin, 1994). This is precisely the reason that among many tribal groups e.g. Kutia Kondha, Muia, Madia, Bhattra, Halba, Jaunsari, Santhal, Lodha, Kharia, Bhil, Rathwa, Mina, Jatapu, Saroa, Pando, Khairwar, Oraon, Munda and among many others; symptoms such as pains and aches, weakness, scabies, prolonged cough, mild fever, wounds etc. are not taken seriously as symptoms of disease.

Swain (1994) examined in depth the etiology of perception of health and perception of illness prevailing among the different tribal groups of India. It has been realised that diseases are not only due to physical, chemical or biological processes but also due to a number of socially and culturally determined factors.

Bhattacharya (1995) discussed the folk medicinal claims for the treatment of general diseases from Patalkot valley of Chhindwara district (M.P.). During the course of ethnobotanical investigations, some interesting, indigenous medicinal plants have been reported for the treatment of venereal diseases i.e. Gonorrhea, Syphilis among the tribals (Bharia and Gond) of Patalkot valley, Eight indigenous plant species have been reported which cure different diseases. He has observed that in Patalkot valley mostly tribal men are used to practice the indigenous plants in their daily health care. In rural areas, venereal diseases are common among tribals due to unhygienic sexual practices. Tribals use indigenous plants for the treatment of venereal diseases.

Ghoshmaulik et al. (1995) described the health situation of the Juangs, a primitive tribal group of Orissa. The disease prevalence among the Juangs suggests that these people are mostly victims of environmental infections. The study reveals that the Juang people are more dependent on the medicine man that the government primary health centres. The village indigenous medicine man or Shaman receives respect and faith, as the villagers think that he treats them well. The people visit the village medicine man more frequently because the primary health centres are located far away from most of the villages. It was found that the local health centres are not fully equipped with required medicines for the general treatment of the people of the villages.

Devarapalli (1996) conducted survey on maternal care and obstetric practice among the Konda Dora tribes of Andhra Pradesh. It was found that Konda Dora women continued to work till the time of delivery. Dietary restrictions were also imposed on her during pregnancy. Beans were avoided, as they were believed to cause epileptic fits. Deliveries were conducted at home. Umbilical cord was cut with the help of sterilized knife. After delivery the women remains completely at home for a minimum of one month.

Pandey et al. (1996) studied the maternal and child practices among the Khairwar women of Madhya Pradesh. The findings showed that pregnant women did not receive any special antenatal care or diet. There was no restriction on her daily work, including fetching of water and cutting of wood. The delivery was usually conducted by elderly women and the ANM or trained dais was not called and in case of complication the pregnant women was usually left at the mercy of god. The umbilical cord was usually cut with the help of sickle or old blade.

Lakhwinder P Singh, Shiv D. Gupta were conducted a study (1996) on 'Health Seeking Behaviour and Healthcare Services in Rajasthan, India': A Tribal Community's Perspective in four tribal districts of southern Rajasthan namely Banswara, Dungarpur, Udaipur and Sirohi. Their study looks at two major issues related to health management: health seeking behaviour and other issues

related with the community's perception of the health services, the service providers and others like traditional healers and private organisations involved in the health sector. According to their study in General Problems e.g. Fever (Bukhar /Taav) - The first stage of treatment normally is giving the patient some tea. Then, people seek the help of the bhopa, the faith-healer (also called jhare wala). If it does not get cured, then people resort to allopathic medicine. Likewise, in the case of Malaria (Malaria taav) also, which is very common during and after the rainy season, the treatment sought is the same. They are also suffering by Poisoning (Jahar, Vish), Dental Problems and other problems included cough and cold. The common treatment mentioned for this problem was taking honey, crushed tulsi leaves (sacred basil) and tea with black pepper. Diarrhoea (dast) was the main problem faced by children under 5 years of age. The local treatment administered at home was giving some water with lemon (nimbu paani) and salt, milk with sugar (doodh) or a kind of soup. The problems (Ante-Natal Care) faced by pregnant women during their term included indigestion, vomiting, oedema (haath pag sooje), general weakness (kamjori) and body ache (haath pag toote). Some home remedies practiced include giving "burnt and ground corn cobs" to those suffering from vomiting. Generally, the females looked upon these problems as part of being pregnant and a price one had to pay for being pregnant. They would try to take them in their stride and carry on as normally as possible. Women's are also suffered by Health seeking regarding Abortion.

Mitras et al. (1998) have examined the various environments, socio-economic and cultural factors whose interplay determines the health of pregnant and nursing mothers in 'Bhumiheen camp', a slum in Govindpuri, South Delhi. They have tried to understand the health problems and practices of slum women and the role of socio-economic and physical environment in influencing them. They have found that the most direct effects of poor health and nutrition among females in countries like India are high mortality rates among young children and women of child- bearing age and high morbidity rates throughout the life cycle. The effects of pervasive ill health extend beyond the women herselves. Women's health and nutritional status is bound up with social, cultural and economic factors that influence

all aspects of their lives, and it has consequences not only for the women themselves but also for the well-being of the family and functioning of households. For improving the health status of poor women, greater opportunities of schooling and employment as well as some changes in health system are needed, to increase the demand for health services and women's ability to use them. They have found that a perceived relation between poor surroundings and sickness exists among slum women.

A study on 'Ethnomedicinal Plant Uses in a Small Tribal Community in a Part of Central Himalaya, India' conducted (1999) by C.S. Negi, Sunil Nautiyal et al. The Raji tribe a smallest group among the native societies of Central Himalaya, inhabiting in Kumaon region bordering to Nepal, has strong faith and belief in traditional health care system, viz. herbal treatment. In this study the 50 plant species are documented here pertaining to the uses in traditional health care system of this under developed tribal community. The importance of documenting indigenous knowledge base related to ethnobotany, as described here becomes important in view of rapid socio-economic and cultural changes. Of the total 50 species 3 are common which preferred by all the traditional healers of Raji tribe to curing the different ailments. (60-65%) people were found dependent on herbal treatment. And for 11 major ailments assessed in detail for the present study the fever, spasm, delivery, jaundice, head ache, toothache and skin diseases are mostly cured by herbal treatment while applying traditional medicine prescribed by traditional healers. Generally people preferred allopathic treatment to cure only some particular diseases like fracture, tuberculosis etc.

Kongodier (2002), viewed in his paper on 'fertility and mortality differentials among the war Khasi of Meghalaya' has revealing that the factors like maternal age and age at marriage may a significant role in regulating the fertility rate in the war Khasi population. The effect of maternal education was not statistically significant after allowing for the maternal age factor. The mortality rate, particularly infant mortality rate was significantly associated with the maternal age and youth order with regards to religion, the fertility and mortality rates are more or less same in boon the religious

groups, though they are slightly lower in the Christians than in the non-Christians.

Sengupta et al. (2002) conducted a comparative study on 'Haemoglobinopathies in Tribal Populations of Arunachal Pradesh and Tripura (North East India)'. Screening of adolescent school children has been undertaken in tribal populations of Tripura and Arunachal Pradesh. In Tripura Total persons screened of all age groups were 310, of whom 196 were school children. The major group belonged to the Tripuri (Deb Barman) tribe, while Chakma, Jamatiya, Rupini, Aslong, Dangsha, Kalai and other tribes were also tested. The results of screening showed HbE inheritance in majority (142) as carriers (45.8%) and homozygous E (14.83%). Only 78 (25.16%) were normal. Among school children 57.65 were HbE carrier and 20.40 were homozygous E. Chakmas who are considered of Bangladeshi origin showed 8 out of 9 children with HbE trait while the Jamatias also showed 8 carriers of HbE out of 9 children. The adi Tripuris, Dewan, Riang and Naotia tribal sampling was low 5, 4, 3 and 2 children, respectively and displayed the same picture. The Arunachal Pradesh population varied from the Tripura population in being physically in much better shape despite a more difficult and strenuous lifestyle and low population density. In possibly the first reported screening of adolescents – unrelated boys belonging to twenty one different tribes were screened. Of these 83 (93.25%) showed no abnormality and a Hb% of 13.31 mean value with 2.51 mean HbA2 and 0.74 HbF. There were 5 (5.61%) carriers and one Eβ-thalassaemia with Hb 10.1 HbE 71.4 and HbF 12.5. HbE occurred in only 5 of which one each was found in Galong (out of 7), Apatani (1 of 9), Singphoo (1 of 3), Tagin (1 of 3) and Tangsa (1 of 7). Study of Arunachal Pradesh tribals gives a picture of little admixture but the presence of HbE is disquieting. HbE has been reported in general populations of Adi, Apatani and Nishi tribes10 and is likely to be maintained by clan endogamy.

A study on 'Radiation and Tribal Health in Jadugoda'- The Contention between Science and Sufferings, was conducting (2003) by C.J. Sonowal and Sunil Kumar Jojo. Studies have shown that major industrial projects, irrigation, power projects etc. have already displaced

a lot of tribal people from their homes creating irreversible damages. They are conducting this comparative study in two localities namely, - Jadugoda and a village called Bara Goira, inhabited by the same community were selected. Villages covered in Jadugoda are Chatikocha, Tilaitand, and Dungridih. The study revealed that, in Jadugoda, among of 377 persons surveyed 66 persons were reported to be having some sort of diseases. They are suffering by TB, Cancer, Frequent fever Body pain, Menstruation, Deformity Chest pain, Hydrosol etc Skin disease Brain damage etc. TB among the people is quite high. According to the sex difference it becomes evident that the numbers of affected persons especially in case of TB are far greater among the males. Some people suffering from same ailments are very few in Bara Goria also. The number of people suffering from TB is also very little in number: 1.3 percent compared to 6.4 percent in Jadugoda Most of the tribal people lost their fertile land to the uranium plant.

A study conducted by R.K. Mohanta, S.D.Rout and H.K. Sahu on 'Ethnomedicinal Plant Resources of Similipal Biosphere Rreserve', (2003) in Orissa, India. The study was carried out in 35 villages of buffer and core areas of the Similipal Biosphere Rreserve during 2003-2004. The study reveals that the inhabitants of Similipal area have vast knowledge about ethno medicinal uses of plants growing in their vicinity. The tribal inhabitants like Kharia, Mankadia, Bhumija, Santals, Gonds, Kols and Mahalis dominate in Similipal. These tribes live in deep forests with their own community and use a large number of plants for their medicine. Twenty seven (27) species were to be used in different ways to cure this ailment. These include plants whose medicinal importance has not been recorded and reported so far, or about which new information on medicinal uses and mode of administration has been obtained. Their observation revealed that the tribes used stem and bark as the most common crude drug in their preparations to cure different diseases. Although the information given by tribal's of Similipal are not comparable to the modern medicine, their efficacy is claimed to be high.

Kotal (2004) in his paper on 'the Koch of Meghalaya' said that the Koch population of Garo hills as a whole is highly endogamous in relation to other population. Koch population of

Garo hills is divided into a number of sub populations like Chapras, Sangas, Satparis, Tintikiyas, Wanangs, Banais and Sankars, which may exchange genes with one other with litter effect of distance.

Marak (2004) in her paper on 'Supernatural beliefs connected with child birth among the Garos of Assam' has attempted to look at the various supernatural beliefs surrounding the birth of a child in Garo society. These beliefs, some rational, some not, are present from conception, throughout pregnancy, birth and therafter through out one's life.

Das and Sharma (2004) in their paper on 'antenatal, natal and postnatal health care practices among the Idu Mishmi's of Arunachal Pradesh have attempted to investigate the health care practices of mothers and infants among the Idu-Mishmis of Arunachal Pradesh that the research findings of survey demonstrated. Majority of the women had their first conception between the age of 18-20 years and 30.85 percent carried their first child before they mere 18 years of age. Thus, the age at marriage and the age at first conception of the women are low. The chances of child survival are lower to those mothers whose age at first child birth is low. More than half of the surveyed women said that they visited to Doctors when they came to know that they were pregnant but other 44.7 percent did not have any medical checkup during pregnancy. Only 17.02 percent pregnant women took two doses of tetanus toxoid and 46.81 percent took only single dose. Moreover, 71.28 percent deliveries were undertaken at home.

Balgir (2004) in his paper on 'health care strategies, genetic load and prevention of hemoglobinopathies in tribal communities of India' has assessed the magnitude of hemoglobinopathies, related health problems faced by affected people has highlighted the preventive strategies among the tribal communities of India. It has been estimated that there are about 45 million carriers of hemoglobinopathies and about 15,000 infants are born every year with genetic load of hemoglobinopathies in India. Opening of antenatal and prenatal diagnostic facilities near the vicinity of at risk tribal populations, providing genetic/ marriage conselling, imparting

health education, economic viability etc. are the basic approaches which may be able to alleviate the sufferings of downtrodden masses in India.

Rao et al. (2004) in their paper on 'nutritional status of children in north-east India' have examined the nutritional status of children in the north-eastern states of Arunchal Pradesh, Meghalaya, Manipur, Mizoram, Nagaland, Sikkim and Tripura. The study highlighted the problem of underweight, anemia, morbidity, malnutrition among the children.

Chao et al. (2004) in their paper on 'Psychological well being of the elderly among Nagas aid that the overall view of the elderly social psychological well being depicted a multi faceted issue involving many factors, with a degenerative symptoms showing as people grow older, with in the aging community, gender different prominently show that women elderly than men have poorer social psychological well being among the women may be due to various integrated factors like poor education background, which is directly responsible for poor awareness of their poor nutrition and health care, weaker in their economic status, and also resulted due to socially constructed roles, status and other stereotypical attitudes, which restrict their subjective well being – joyfully, meaningfully and purposefully living in the twilight areas.

Hemlata and Kumari (2004) in their paper 'health care practices among tribes of Manipur' said that though education has open up new vistas in their mode of thinking, tribes in Manipur still are back to their traditions health care practices as this proves to be convenient and easily accessible to them. The interference of supernatural agency is predominant in the context of health and disease. They give first preference to the traditional health car practices. Moreover, the modern trend of health is practices could not be reached adequately among them. Their lack of awareness and poor economy are still a hindrance in improving their health status.

Ibala (2004), narrated 'bon medicine among Manpas in Western Arunachal Pradesh' and maintained that only supernatural

can cure and heal the source of illness, through the medium such as bampo, but it not the deeds of bonpro himself.

'Ethno-Medicinal Practices'- A Case Study among the Sonowal Kacharis tribe of Dibrugarh, Assam, was conducted (2005) by Farida Ahmed Das, Indira Barua and Deepanjana Dutta Das. This study makes an attempt to find out the beliefs and practices related to health care system of the Sonowal Kachari tribe of Assam. The study reveals that the Sonowal Kachari believes that certain diseases are caused by malevolent super natural forces and they try to cure them by pleasing the supernatural powers through prayers and sacrifices. They also use various locally available medicinal herbs for treating diseases. Village medicine men locally known as 'Bez' who have a good knowledge about the herbal plants usually treat the patients. Many elderly persons of the village are also aware about the importance and use of such herbal medicine.

Arup Maharatna (2005) in his classic paper on 'Fertility, mortality & gender-bias among Indian tribes: What do we really know' endeavors to make a comparative study of tribal and non-tribal populations. The study tests the hypothesis and reports that while in initial stages of economic growth process tribes have a faster numerical growth as compared to the non-tribe population counter-part, But this does not remain a stable feature for the advanced stage. The rapid growth in initial stages is due to sudden drop in mortality as an impact of modern amenities of health protection and child care while the fertility keeps guided by the traditional outlook and increased comforts from the earlier stage of deprivation remain the birth rate unchecked. Rapid improvements in the levels of practiced hygiene, sanitation, and health pull the child mortality down.

A study had been completed (2005) by M. Baruah & D. Kalita on 'Ethnomedicine used by Mishings tribes of Dibrugarh district, Assam'. They revealed from their study that ethnomedicine has been used by Mishings tribe for the treatment of diseases like allergy, backache, cough, constipation, cut injury, diabetes, dysentery, eczema, epilepsy, indigestion, lice control, piles and ringworm infection. A total number of 22 medicinally important plant species

are described. Among 22 species enumerated, 17 belong to dicotyledonous and 5 from monocotyledonous. Both wild and cultivated plant species are used for the preparation of ethno medicine by Mishings. Some of the medicinal plants species are being used for the preparation of medicine and also by other tribes. Biochemical analysis, pharmacological evaluation of the ethnomedicinal plants used by the Mishings may bring some new information. Isolation of active ingredients present in such plant species and their screening of pharmacological action may throw some new scientific information.

A study on 'Ethno-medicinal plant knowledge of the Mulla Kuruma tribe of Wayanad district, Kerala' conducted (2005) by V P Silja, K Samitha Varma & K.V Mohanan. Mullu Kuruma tribe is a very prominent group of Wayanad district of Kerala with unique culture and ethno botanical practices. The study has revealed that the use of 136 plant species for traditional medicinal purposes by the tribe. According to their study they use about 14 plants for the treatment of skin diseases, 10 for inflammation, 3 as abortifacient, 9 for dandruff, 11 dysentery, 6 for piles, 7 for epilepsy, 19 for asthma and other bronchial diseases, 11 for anemia, 4 for constipation, 1 for tuberculosis, 8 for jaundice and other liver diseases, 6 for burns, 7 for leucorrhoea, 2 for migraine, 5 for wounds, 3 for malaria and 13 for urinary complaints and kidney stone. Mulla Kuruma tribes used different parts of plants like leaves, roots, rhizome, inflorescence, fruits, seeds, etc. are being used for different purposes.

A study on 'Traditional phyto-remedies for worm infestations' of two Important tribal communities of Assam, India was conducted (2006) by Hazarika and Pandey. This study was carried out in four villages inhabited by two tribal groups, namely Deuri and Mishing i.e. Namdeuri, Upper Deuri, Kalbari and Banhphola Mishing Gaon of the Jorhat district of Assam, to acquire knowledge of the local use of plant resources to prevent and cure intestinal worm infestations. According to their study most of the plant species used traditionally for the treatment and control of worm infestations by these two tribal communities belong to 29 families i.e. Acanthaceae, Ananaceae, Apiaceae, Aracaceae, Asteraceae, Caricaceae, Chenopodiaceae etc. Of the 43-plant species

mentioned, 34 plant species were used frequently and the other 9 plant species were used only rarely. They revealed that, out of 43-plant species, 22 were used as general dewormers, 6 species were used for tapeworm control/cure, 6 plant species to cure pinworm, 6 plant species were used to cure round worm and 3 were used to cure hookworm infestations. The use of different plant parts, such as the leaves, juvenile shoots/plant tips, seeds, fruits, flowers, barks, roots and whole plant were recorded regarding their use as herbal medicines. The methods of preparation of these herbal medicines are simple, such as warm water extraction of ground or powdered, fresh or dry plant materials, juice, ground plant saps and paste of plant materials.

R.D. Anpin Raja and J.W. Prakash conducted a study (2006) on 'Plants Used as Anti-Venom by Kani Tribes of Kilamalai' .Their study deals with the anti-venomous effect of some herbal plants used by Kani tribe.Reserve Forest, Kanyakumari District. Study finds out that the 11 species of anti venomous medicinal plants used by the Kani tribes. Among the eleven known genera few are used as anti venom against snake bite and some as first aid. Few plants are used against poisons like spider bite. Plant roots, leaves, tubers and even the whole plants are used as best anti venom medicines. It has been found that the Kani tribal community of Kilamalai reserve forest is rich in ethnopharmacological knowledge especially in the anti venomous treatments. However the traditional knowledge of various ethnic communities is eroding very fast. The reasons for such erosion are perhaps rapid socio-economic and cultural changes, lack of incentives for economic upliftment of local people according to their ecological surroundings. The importance of documenting indigenous knowledge base related to ethno medicine, as described here becomes important in view of rapid socioeconomic and cultural changes.

Another study were conducted (2006) by Sahu, Dhal and Mohanty on 'Potential Medicinal Plants' Used by the Tribal of Deogarh District, Orissa, India. The study investigation revealed the medicinal plants of 50 species and 49 genera belonging to 40 families, which are commonly used for various ailments of various

tribes (GGonda, Mu-Munda, K-Kondha, etc.) of the area surveyed. The study provides information on 33 human diseases against which the plants are used by the tribes of Deogarh district. It has analysed that spermatorrhoea and eczema are the frequently occurring diseases and asthma, hydrocoel is not to that area. The plants like Cuscuta reflexa against hydrocoel, Uraria picta against sterility, Woodfordia fruticosa for irregular menstruation, Gloriosa superba against piles are ethno medicinally very important to the tribals. The people of this region derive immense benefit by using herbal medicines for their primary health care. In Orissa, particularly in Deogarh district the medicinal plants available in nature and the traditional medicinal knowledge available with the tribes are still not explored well which needs a thorough investigation.

A study were undertaken by Chauhan, Chauhan, Shrivastava on (2007), 'Rural Epidemiology of Maternal Mortality in Tribal women' from Bastar, Chhattisgarh, India. The primary objective was to study epidemiology of Maternal Mortality in tertiary care hospital in the tribal region of (Bastar), Chhattisgarh, India and their relation to age, education, Occupation and socioeconomic status of the diseased mothers. The study showed that among 119 diseased mothers 26 (21.85%) were of 25 years of age. 16 (13.45%) were of 22years, 14 (11.76%) were of 30 years, 11(9.24%) were of 20 years, 11 (9.24%) were of 35 years, 8 (6.72%) were of 19 years,7 (5.88%) were of 23 years, 6 (5.04%) were of 21 years, 4 (3.36%) were of 28 years, 4 (3.36%) were of 32 years, 3 (2.52%) were of 26 years, 3 (2.52%) were of 27 years, 18,24,29,38,40 and 42 years age group were having 1 (0.84%) each. Out of 119, only 1(0.840%) was educated up to 11class, 9 (7.563%) were educated up to 8 class, 10 (8.403%) were educated up to 5class, 11(9.243%) were educated up to 4class, 88 (73.943%) were illiterate. A majority of patients had a low education status. Out of 119, 75 (63.025%) were Laborers, 43 (36.134%) were Farmers, and 1(0.840%) was street beggar. A majority out of 119 patients, 118 (99.12%) belonged to the lower social economic status with monthly income less than Rs. 2126=00 and 1patient (0.88%) was street beggar.

Gupta et. al also conducted (2007) a study on 'Ethno medicinal uses of some plants used by Gond tribe of Bhandara District, Maharashtra'. This study was carried out among the Gond tribe of Maharashtra. Study revealed that the medicinal utility of plants occurring in the area by Gond tribe. 53 plant species representing 31 families and 46 genuses. These plants are mostly used to cure skin disorders, diarrhea, jaundice, cough, wounds, piles, urinary troubles, spermatorrhoea, as an eye drop and antidote to snakebite and scorpion sting. Leaves are the most widely (35%) used plant part of the reported medicinal plant uses, followed by roots (28%), seed (19%), fruit (15%) and bark (13%). Resin, oil, gum and inflorescence are also used occasionally which account for 11% of the total uses of the plant parts. A majority of remedies are prepared in the form of juice followed by powder and paste form, from freshly collected plant parts. It is observed from the study that most of the tribals cultivate some common medicinal plants in their home gardens either for medicinal use or for use as vegetables. In some treatments, animal part/waste is used along with the plant material. Most of the ailments such as stomachache, menstrual problems, fertility problems, urinary problems etc. can be cured by oral absorption while most of the skin diseases, wounds and body swelling can be cured by external application.

Rajadurai, Vidhya, Ramya and Bhaskar were conducted (2008) a study on 'Ethno-medicinal Plants' Used by the Traditional Healers of Pachamalai Hills, Tamilnadu, India. The traditional healers of Pachamalai hills were studied for the use of medicinal plants. They were report 12 species of medicinal plants used for common ailments such as asthma, cough, cold, fever, stomach problems, snake bites, skin disease etc. They reveals that from their study, the traditional healers are on the decline because the younger members of the tribe have started moving towards the towns and cities and are not willing to practice this form of medicine. There is danger that the knowledge of these medicinal plants will also die with them. They said that, it is therefore, necessary to document the plants and take efficient steps to conserve them.

Rout, Panda and Mishra were undertaken a study (2008), on 'Ethno-medicinal Plants Used to Cure Different Diseases by

Tribals' of Mayurbhanj District of North Orissa. They have discussed in their studies that, 58 plant species belonging to 34 families used in folk medicine have been documented. Due to poor condition of modern healthcare facilities and poverty, indigenous people of the district fully or partially depend on local medicinal plants. Tribal people are used every plant parts for medical preparation. In some cases the whole plant including roots was utilized. An attempt has been made to document traditional knowledge from the baidyas group of Hatikote, Moroda & Rasgovindpur and Udala & Kaptipada blocks of Mayurbhanj district on the treatment of various diseases enumerated.

A study on 'Ethno-medicinal plants used to treat gynaecological disorders by tribal people' of Madhya Pradesh, India, was conducted (2008) by Tripathi Rakesh, Dwivedi S.N. and Dwivedi Sumeet. The present study was initiated with an aim to identify medicinal plants resources and traditional knowledge of tribal people to treat several gynaecological troubles. Their study reveals that knowledge of use of different ethno-medicinal plants, their parts, doses, application was acquired by local healers by trials and error method. Such knowledge is transferred from one generation to another by word of mouth only. Such knowledge is restricted to few families of the area recognized as 'Vaidyas' and 'Ojhas'. They generally treat all kinds of diseases including gynecological disorders in locality and transfer their knowledge to their next generation. They generally diagnose diseases based on symptoms as well as based on their personal experience in treating human ailments. Medicines are taken orally directly or mixed with water, milk, honey, black pepper etc. Besides gynecological disorders, these plants species are traditionally used to treat other venereal diseases like abnormal discharges of semen, seminal weakness, gonorrhoea, syphilis, impotency, complications before and after birth, etc. They are used single plant part in many cases but in many condition polyherbal preparation were also been used by the tribes.

An 'Ethno medicinal Survey on Plants used by Tribals in Chitteri Hills' Dharmapuri district Tamilnadu, India, conducted (2008) by K. Kadhirvel, S. Ramya, T. Palin Sathya Sudha et al. This survey

was conducted to collect information about medicinal plants used by Malayali tribes in villages located in the forest area of Chitteri Hills. About 65 ethnomedicinal plant species distributed across 38 families have been documented in the present study. Results indicate that fresh plant materials were invariably preferred for treating ailments. Informations reveal that Malayali's largely depend on medicinal plants to meet their primary healthcare needs. They use ethnomedicinal plants to treat ailments like cold, cough, fever, headache, stomachache, diarrhoea, dysentery, skin diseases, poison bites, cut/ wounds, diabetes and sexual disorders. The study depicts that local people prefer folk medicine due to their socioeconomical status, lack of modern healthcare facilities and inadequate transportation. Resource persons were invariably elderly people and the younger generation is reluctant to take up nattuvaithiyam. Therefore, documentation of traditional knowledge is the only way out to preserve the knowledge base conserve the plant resources endemic to this area.

Chandraker et at. (2009) were conducted a study on 'A Study of Reproductive and Child Health' among the Dhur Gond Tribal Community of Mahasamund District, Chhattisgarh, India. The study focused on to understand the pregnancy related women reproductive health, infant and child morality and also to assess the nutritional status of mother and under five children. The sample for the present cross-sectional study was collected from two villages (Bhadrasi and Basuladabri) of Bagbahara block of Mahasamund district of Chhattisgarh State, India. A sample of 174 married Dhur Gond tribal women along with 68 children (32 boys and 36 girls, aged less than 5 years) were selected for the present study. Their study revealed that high percentages of mother had not taken ante-natal checkup (51.72%), tetanus injection (41.38%) and iron and folic acid tablets (56.32%) during pregnancies. 94.83 percent deliveries performed at home and 57.47 percent birth were done mainly by untrained *dai* (traditional birth attendant's). Infant and child mortality rate was 5.92 and 4.28 per 100 live births respectively. 47.12 percent of mothers were undernourished (BMI <18.5 kg/ m2) and all the children were suffered from malnutrition. Grades II and III malnutrition were higher among girls compared to boys. Poor

health status during child bearing period, low ante-natal care, high deliveries at home along with high prevalence of under nutrition of under five children and mothers. These are mainly due to low socio-economic condition, high illiteracy, lack of awareness among Dhur Gond tribal community.

Ranganathan, Vijayalakshmi and Parameswari (2009) conducted a study on 'Ethno medicinal Plants and their Utilization By villagers in Jawadhu Hills of Thiruvannamalai District of Tamilnadu, India'. In this study 50 angiospermic plants were enumerated with their medicinal importance. All the 50 species have medicinal uses. These plant species used by Malayalis in their day-to-day life to cure various diseases 10 species are used for snake bite. Several species are used for diarrhoea, snake bites dyspepsia, diarrhoea and fever. Species such as Bauhinia tomentosa, Coleus forskohlii, Gymnema sylvestre, Hardwickia binata and Holoptelea integrifolia are used to treat diabetes. For treating skin diseases, Pterocarpus marsupium. The local people utilize Terminalia bellirica, Terminalia chebula are used for cure cold, cough, fever and stomachache. Due to more demand of ethno medicinal plants and more profit, local villagers have been motivated for conservation and cultivation of these plant species.

As well as Shukla and Chakravarty conducted (2009) a 'Study of Traditional Medicinal Practices among the Raj-Gonds tribes' of Korba District of Chhattisgarh. In this study they documents the traditional knowledge of medicinal plants that are in use by the Raj-Gond tribes. The information was collected from community members as well as from traditional healers. Authors argued, Raj-Gonds believe that any disease is caused due to magico-religious elements, malnutrition and environmental imbalance. Raj-Gonds usually approach Baiga and Vaidhraj, who are the traditional healers. These healers also diagnose the disease through magico-religious methods. They identify the involvement of spirit, demons or deities. Raj-Gonds are pluralistic in seeking treatment for various illnesses and diseases. However, they prefer the traditional healers. Their study documented the information on various herbs including the derivatives or parts of the herbs they use, preparation of the drug

for use, dosage, etc. The study warrants evaluating medical efficacy of these traditional medicines and documenting oral traditional knowledge, which persists among tribal communities.

C.J. Sonowal conducted a study (2010) on Factors Affecting the Nutritional Health of Tribal Children in Maharashtra. The study tries to find out the impact of socio-cultural, political and economic environment on nutritional status of tribal children in Maharashtra, India. For this study 55 villages was selected from 3 districts namely Godchiroli, Nandurbar and Thane. The criteria for selecting such families was based on the presence of less than 6 years old children and expectant mothers and also presence of malnourished children as revealed by the local Anganwadi workers' records. According to their study overall literacy rate among the females is 30 percent. 30 percent of the households are engaged in cultivation as their primary occupation and wage labour as secondary occupation. Along with cultivation 13.7 percent household have business of some sort as secondary occupation. Nearly 42 percent of the household's primary occupation is wage labour while they partly engage in cultivation. Service of some kind as primary earning source is accounted for 14 percent of the household while 9 percent of them have cultivable land to earn partial living. 31 percent of women got married before the age of 15 years and as many as 49 percent got married by the age of 17 years. Thus 80 percent of women got married before the recommended age of 18 years. Among the three localities a large number of women in Gadchiroli got married before the age of 15 years. 53 percent of underweight children born to mothers who have gap of one year and 38 percent of underweight children are assigned for mothers having two years gap. Among all children 35 percent malnourished attached to mother having one year gap. It is found that among 300 selected mothers only 13 percent have delivered their babies in Hospitals. Among them only 4 percent mothers have to hospital as a convenient place for child birth whereas 9 percent of them have to hospital due to complicacy they encountered in course of time.

A study had been taken by Das, Kapoor and Nikitin (2010) on 'A closer look at child mortality among Adivasis in India' They

were using data from the National Family Health Survey 2005 to present age-specific patterns of child mortality among India's tribal (Adivasi) population. The analysis shows three clear findings. First, a disproportionately high number of child deaths are concentrated among Adivasis, especially in the 1–5 age groups and in those states and districts where there is a high concentration of Adivasis. Any effort to reduce child morality in the aggregate will have to focus more squarely on lowering mortality among the Adivasis. Second, the gap in mortality between Adivasi children and the rest really appears after the age of one. In fact, before the age of one, tribal children face more or less similar odds of dying as other children. However, these odds significantly reverse later. This calls for a shift in attention from infant mortality or in general under-five mortality to factors that cause a wedge between tribal children and the rest between the ages of one and five. Third, the analysis goes contrary to the conventional narrative of poverty being the primary factor driving differences between mortality outcomes. Instead, the authors find that breaking down child mortality by age leads to a much more refined picture. Tribal status is significant even after controlling for wealth.

A study conducted by Kachare, Surywanshi and Raut (2010) on 'Ethno medicinal plants' of Nanded and Beed district from Marathwada, Maharashtra. They were discussed the uses of ethno medicinal plants in their studies. The plants parts are most commonly used in treatment of various diseases are roots, leaves, whole plant bark and seeds. According to them inspite of vast scientific development in modern age man is looking towards traditional medicines. Due to ethno medicines many diseases are cured like jaundice, snakebite, scorpion bite, leucoderma liver and many more challenging, incurable diseases which are not cured by the modern medical sciences are cured by traditional medicines. This knowledge still exists in the villages. In this study interviews of traditional Jantas were taken, the details of plants collected, identified were noted. It is suggested that local forest management with Forest Department and NGOs needs to pay attention for Conservation of commercially important species, with sustainable harvesting methods.

The cultivation and detailed assessment of the economically valuable medicinal plants is the demand of present day. Hence it is to be collected, preserved, protected and propagated for future generation.

Balgir completed a study (2011) on 'Genetic Disease Burden, Nutrition and Determinants of Tribal Health Care in Chhattisgarh State of Central-East India'. This study pertains to genetic disease burden, nutritional status and biomedical anthropological assessment with particular reference to determinants of tribal health care. For the present study, 815 Ashram-school-tribal students aged 6 through 15 years were randomly selected from different schools from the districts of Koraput (Paraja =176), Nawarangpur (Bhatra =166), Kalahandi (Gond =219), and Kandhamal (Kondh =254) in the state of Orissa. Their study revealed that the tribals, unlike the general populations in Chhattisgarh is vulnerable as well as has major threat of biomedical health problems. The genetical diseases pose a major burden on them. Hereditary disorders of blood like hemoglobinopathies, β-thalassemia, G6PD enzyme deficiency, hemophilia, and color blindness, chromosomal aberrations, congenital malformations, inborn errors of metabolism, etc. among others take a high toll of life. The preventive and control strategies along with remedies for some of these hereditary disorders have also been highlighted elsewhere.(10-16). Analysis of ABO blood groups among the four tribes showed that the blood group B predominates over A among Bhatra, Kondh and Paraja except the Gond tribe. The frequency of blood group O is the highest among the Bhatra, Gond and Paraja except in the Kondh tribe. The frequency of Rhesus negative blood group is very low (0-0.6%) among these four tribes than the average frequency in other Indian population groups. Low frequency of this gene among the tribals of Chhattisgarh is a pointer to the high selection pressure at this locus with a resulting loss of fetuses and newborns at various stages of life.

Statement of Research Problem

Most of the tribal communities live inside dense forests in hilly areas and consequently enjoy an effective isolation from the main stream of the country. Their more or less isolated life prevents them from exploiting many of the advantages of modern civilization. On many occasions they are found rejecting the programmes of modernization implemented by the governmental and voluntary agencies. They are still depending upon their own traditional medical practices when contracted by diseases. The ingredients of their medicines include herbs in roots, barks, leaves, fruits and other plant parts, animal derivatives and also a few minerals. They have certain age old techniques and methods of preparation and administration of medicines for different diseases. Healing rituals employed for invoking the intervention of supernatural forces are an integral component of the treatment procedure. On the whole, it seems that traditional medicine helps the tribes to check the diseases satisfactorily and to lead a healthy life. However ethno medicine of the tribal is now influenced by a number of forces external to the community, which are capable of bringing out changes into this traditional system. Modern medicine is the most important agent of change influencing the ethno medical system. As a part of the tribal welfare programmes, the government has opened a number of curative centres like hospitals, dispensaries and primary health centres (PHC) in the tribal areas and also has employed mobile dispensaries to improve the availability of medical facilities for them. In addition to this modern medicine is also available to them form a number of private nursing homes and hospitals functioning in rural areas within an easily reachable distance from the abode of the tribes. However, on many occasions, the tribal show much reluctance in accepting modern medicine, for the treatment of diseases. It is observed that sometimes their resistance towards modern medicine is disease specific. They accept modern medicine for certain diseases but reject it for some others.

North East India has valuable heritage of herbal remedies. Its rural people and tribes living in remote forest areas still depend to a great extent on the indigenous systems of medicine. So far studies

in this regard have been reported from a very limited number of the tribes of North East region. Therefore further detailed studies on the aspects health practices in the region may provide meaningful ways for the promotion of traditional herbal medicine and indigenous knowledge for the benefit of mankind at large. The present study is an attempt to find out the indigenous and current health practices among the tribal women and the extent to which this system is influenced by various factors of change.

India is blessed with rich and diverse heritage of cultural traditions. These traditions are associated with the use of wild plants as medicine. Interest on ethno medicinal plant research has increased dramatically in the present days. Each ethnic community has their own health care system, their ancient knowledge, sometimes referred to as ethno therapeutics. Over the years, folklore medicine has proved to be an invaluable treasure in present day screening of drugs. The value of medicinal plants to human livelihood is essential and infinite. Obviously they make fundamental contributions to human health care needs.

In pre-modern societies, in all probability and especially in India, health was a part of culture, defined as a total way of life by the people themselves. Thinking about health was integrated into the way of living as a whole. Here a "healthy living", meaning thereby that the physical, social, mental and religious aspects were intertwined with each other. Modern thought, it is obvious, distinguishes, culture, politics, religion, ethics, etc. as separate and independent units without giving any due consideration to their intimate interconnectedness. From various researches carried out, we know now that in earlier traditional societies, generally speaking, these subparts or segments were integrated into a holistic whole, culture touched every aspect of life, as did religion. These were interchangeable concepts in terms of interconnectedness at the day-to-day level of living.

The present work focuses on the health practices of Reang women in Tripura and the knowledge-related to these practices.

Objectives of the Study :

1. To examine the socio-economic features, educational status and demographic attitudes of the *Reang* women.
2. To find out the major health problems among women and children in the study area.
3. To understand the traditional vis-a-vis modern health practices of *Reang* women with special reference to reproductive and child health.
4. To identify the uses of ethno-medicines among the tribes.

Research Methodology

The propose study is empirical in nature and based on mainly primary data collected through field survey. In order to analyze the data statistical tools and techniques, descriptive research design has been adopted.

Coverage/ Universe

The study is confined to the Tripura. In order to conduct the study, purposive sampling procedure was followed for the selection of target population from the universe. The study was conducted in North Tripura South Tripura district of Tripura. The districts were selected based on the concentration of *Reang* community. From each selected district, one block was selected based on concentration of *Reang* community. From each block, 150 women were randomly selected for the field survey. Thus, overall, 300 women were covered as sample of the study.

Study area :

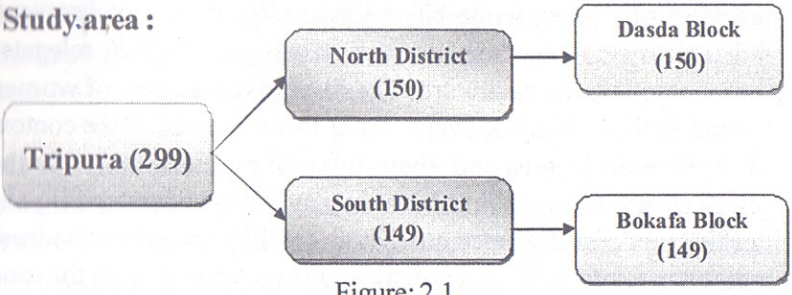


Figure: 2.1

N.B. Figures mentioned in parenthesis is indicates sample size in the study area.

Data Collection

The secondary data and pertinent literature was compiled from published, documented and internet sources. The primary data was collected from the survey of Reang women. The field survey was conducted with the help of structured interview schedules. Interview schedules was pertain the relevant to the objectives of the study.

Data Analysis

The filled in interview schedules will be thoroughly checked and processed with the help of relevant software. The data will be processed with the help of computers for drawing out results and conclusions. Relevant statistical tools will be applied for drawing out results, conclusions and data analysis. Data will be interpreted, discussed and analyzed besides critical appreciation of pertinent literature.

Implications of Study

Traditional beliefs give value and meaning to each phase of the women's life. Traditions and practices represent continuity and are a manifestation of culture , which is the embodiment of a way of life. Any intervention, which is not based on the lived experiences of communities, does not become a part of a way of life . Health care is not merely a service to be delivered but it should build on people's knowledge. We need to understand the health practices of women in the North Eastern Region in a total context, rather than isolating them to arrive at inferences which relegates these practices as backward. The lived experiences of women related to their lifecycle events have to be viewed in the context of their world-view, and their integral relationship with the physical environment in which they live. For understanding the health practices of women one has to see their interconnectedness and inter-relatedness in a holistic manner creating a rhythm and movement. There is an urgent need for systematic documentation of this knowledge by using scientific tools.

3

Reang Tribes in Tripura: A Brief Account

According to 2011 census, the total population of Tripura is about 3,671,032 and one third of the population is tribal people. The Tripuri, Jamatia, Reang, Uchui, Garo, Chakma, Magh, Lusai, Kuki, Halam etc. belong to the tribal community of Tripura. They are the original inhabitants of Tripura. They are accustomed to the cultivation of jhum and also accustomed to forest life since prehistoric age. In Tripura Tribal population forms 31.05 percent of total population which is almost four times higher than the national average. Scheduled tribes differ usually in their socio-economic conditions, development needs, cultural background, ethos, language etc.

HISTORY OF REANG

Reang tribe came to inhabit the land of Tripura from the hills of Chittagong. The ancient records of Tripura state reveals the fact that the tribe of Reang exists in the place from the mid of 15th century. Today, the Reang tribe of Tripura is next only to the Tripuri community in terms of population. The social structure of the Reang tribe is quite unique. There is a chief in every Reang tribe who is endowed with the title of Rai. This very chief is responsible for the welfare of the entire tribe of Reang. In case of any minor or major dispute, the chief offers the last word of judgment. As such, the people of Reang community seek justice only from their leader.

Cultivation is the major source of sustenance for the Reang community in Tripura. As far as education is concerned the Reang tribe of Tripura state has minimal access to the same. The children of Reang tribe rarely go to the local schools. The women of Reang community generally wear the local attires like that of Rea and Pachra. They also adorn themselves with coin rings and indigenous

flowers. The festivals and social beliefs of *Reang* tribes centers on their faith, occupation and age-old customs. The Hozagiri dance form of Reang community is one of its popular cultural features. Rhythmically accompanied by bamboo-made flute, cymbal and khamb, the Hozagiri dance of Reang tribe includes expressive movements of hands, waists and feet.

Populating the state from an ancient age Reang has today become an integral part of the Tripura tribes. Reang are the second largest community of Tripura. They are recognized as one of the 75 primitive tribes in India. In Tripura they are highly concentrated in South Tripura and also in Longthorai Valley Sub-Division. Reang belong to Indo-Mongoloid racial stock. Reang comprises 16.61 per cent population in total tribes of Tripura. Their languages have affinity of Austro-Asiatic groups under Tibeto-Burman family. Reang are still a nomadic tribe and a large number among them maintain their livelihood involving top hill *Jhum* Cultivation and other food gathering activities wild animal and birds etc. By religion they are Animism. Reang traditionally are endogamous and do not marry outside their community. Reang folk life and culture have outstanding cultural components. Hozagiri Dance with melodious tune of flute is most attractive to all. In Tripura they are highly concentrated in South Tripura and also in Longthorai Valley Sub-Division. Due to social transition and modern weave of life, considerable changes could be seen among Reang in the field of Agriculture and other economic activities, social and cultural life, awareness for Education, Health and Sanitation etc. So, Reang are now enlightening tribe of Tripura.

ORIGIN OF REANG

The Reang is the second most numerous sub tribes of Tripuris after old Tripuri clan. According to the legends one of the Tripuri princes was expatriated by the king, who along with his followers migrated to the *Mayani Thalang* area of Lusai hills and founded a state over there. He proclaims as king of the state and the descendent of the exiled Tripuri prince ruled over the state for generations. In due course of time there was no heir to succeed the throne, which leads to

anarchy in the kingdom. Owing to some internal feud and vendetta four chief of the sub tribes, namely *Twikluha, Yongsika, Paisika, Tuibruha* and their entourage left their hearth and home and migrated through Chittagong to the state of Tripura centuries ago. These Reang chiefs could not climb up the Dombur hill peak for two consecutive times and succeeded in third times.

Mahendra Manikya was at the throne of Tripura kingdom. After reaching to the capital these chiefs tried to persuade the ministers and other bureaucrats to give them permission to meet the king and submit their memorandum but was not successful in doing so. By then they have exhausted whatever food and edible they had brought with them and suffered a lot. They were very sad and disheartened by this. They were determined to send the message of their arrival to the king anyhow. In order to send information to the king they broke the dam of the river Gumti where worship was going on at that time. This was a serious crime and all of them were brought before the king. The king ordered them capital punishment. Somehow this news came to *Queen Gunavati* . The chiefs prayed in front of the queen who after persuading the king motivated to forgive these chiefs of their crime, who letter forgave them. Since then the Reangs became very obedient and loyal to the queen and throne of Tripura. It is said that the queen Gunavati fed these chiefs with her breast milk in a big pan of brass, which is still intact with Kotor dofa, which was gifted by the queen. The queen gifted many other valuable things, which were carefully preserved by Reangs till date.

Meska Group & Molsoi Group

The Reang clans are divided into two main groups - (1) Meska and (2) Molsoi.

1. Meska Group: It is divided into seven sub groups or dofa, these are as follows:

- Meska:- Means the lemon tree in Kuki language. There were plenty of lemon trees where the forefather of thisdofa used to live.

• Mwsa :- Means tiger in Kokborok. It is said that the forefather of this dofa was brought up by a tigress in his child hood like the Romulus and Ramous of ancient Rome.

• Chorkhi :-Chorkhi means Spinning wheel in Kokborok, it is said that one Riang chief was speaking obscene about his daughter in-low, when his friends started spinning the spinning wheel to musk the obscene of the chiefs. So the descendent are named after the chorki.

• Raikwchak :-Rai means cane, kwchak means red in Kokborok; it is said that the fore father of this dofa used to wear cane made red colour armlet.

• Wairem :-wai means Tripura, rem means mix/hybrid in kuki language. It is said that they are descendent of Riang man and kuki woman.

• Tokma yakcho :-Tokma means hen, yakcho means toes; the toes of the forefathers of this dofa resembled to that of hen.

• Twimuiyafak :-means tortoise in Riang dialect, the fore father of this dofa were suffering from white patches like the tortoise chest.

2. Molsoi Group: This group is sub divided into six groups, which are as follows:

• Molsoi :-is the derivatives of moso, which means chilli in Kokborok. Their fore fathers first settled in the chilli field of kukis, since they were called in that name.

• Apet :-Apet means is a type of fish in Kokborok. The fore fathers' belly was big like the belly of Apet fish.

• Nogkham :-Nok means house, kham means burnt in Kokborok; once the fore father of this dofa's house were burnt to ashes since then they were termed in this name.

• Chongpreng: - Means a type of musical instrument, it is said that the fore father of this dofa used to survive by playing this musical instrument as they were suffering from 'gungri' disease.

• Yakstam :- Means ring of finger, it is said that the fore father of this dofa used to used to wear ring and used to display proudly to others. This dofa has been in extinct at present.

• Riang kachko: Kachko means chief in Kokborok, the fore father of this dofa were chiefs of Riang.

Kotor Dofa: in the above thirteen dofas there are 26 chiefs or heads, who are designated as Kotor Dofa. Kotor means head dofa means clan or group. The chiefs are divided into two categories, Rai and Kasko.

Rai and his subordinates' chiefs:

Rai: Means Raja or the chief of the sub group is bestowed as Rai.

- Chapiya Khan: Crown Rai.
- Chapiya: Crown Chapiya Khan'.
- Dor kalim: He is the priest of Rai.
- Doloi: Helper of Rai.
- Bandari: Store keeper of Rai.
- Kanda: Servant and holder of umbrella of Rai.
- Doya Hajari:

Drum player. Reang Couple

- Muriya: Trumpet player.
- Dugria: Helper in of priest.
- Dauwa: Arranger of puja, or worshiping.
- Siakrak: distributor of prasad, that is the sacrificial animal meet.

Kasko and his subordinate chiefs:

- Kasko: means chief minister of the sub group is bestowed as Kasko.
- Yaksung: Means the assistant of chief minister.
- Hajra: Servant of Kasko.
- Kangreng: Umbrella holder of Kasko.
- Karma: Servant of Yaksung.
- Khan Galim: umbrella holder of Yaksung.
- Khandol: The collector of food and other required articles.

People of kotor dofa are exempted from paying taxes to the king. It is presumed that the Reangs are the offspring or descendent of Tripura and the Kukis peoples.

Culture and customs

The Reangs are primarily an agriculturist tribe. In the past they mostly used to practise the 'Huk' or Jhum cultivation, like most other Tripuri tribes. Most of the educated are employed in government

job and many are occupying very high post in administration. Some are also started doing business also.

Marriage system

The Reang is an endogamous tribe and had very little contact with the Bengali or other sub tribe of Tripuri. But recently there has been some inter tribe marriages and inter caste wedding among them. The marriage system is similar to other Tripuri tribe of Tripura. There is no dowry system but the bride-groom has to spend to father in-law's house for two years before marriage is preformed.

There are two types of marriages; Haloksai, and Haloksam. Parallel cousin marriage is prevalent but declining. Cross cousin marriage among the Riang is accidental. Child marriage is not allowed, widow marriage is permitted. Widows are prohibited to wear ornaments before one year is passed after the marriage of husbands. Widow and widower are forbidden to participate any entertaining and enjoying programme or activity or attending such activity within one year of death of their spouses. Remarriage of widow and widower are allowed after one year of death of the spouse. Monogamy is the present day practice of the society.

Marriage is arranged through the matchmaker Andra , who goes to the prospective bride's parent for negotiation. Then the brides party is invited to finalise the marriage in Koksumgma, while pork, fowl, rice, rice bear are served. Marriage is settled to the satisfaction of both the party. The Ochai performs the wedding ceremony on the nuptial day fixed.

The Reang widower is not permitted to get marry to an unmarried virgin girl. The Reang marriage bond is very strong and Reang mean cannot divorce without the consent of wife. If any Reang is alleged for extramarital relationship and found to be true then they are dealt with strict punishment and heavy penalty is imposed upon.

Dress and ornaments

The traditional dress of the Reang is simple and plain like other Tripuri people. Traditionally the men wear a hand woven

loin cloth and a piece of cloth as a wrapper for upper portion. The women wear a long cloth called Regnai, wraparound; from the waist to down to the knees. A *Riha*, covering the chest and Rikutu for covering the whole upper half of the body, wears the upper part of the body. These are woven by the Reang women, which are colourful and very beauty full but now-a-day the educated masses are wearing all the modern dresses like any other part of the world.

The Reang women are very fond of personal decoration and take much care for the makeup and hair-do. They love like other Tripuri people, ornaments, flowers, and cosmetics. Silver ornaments especially the necklace of silver coins, the Rangbwtang have a pride of place and status.

Dance and music

Dance is very much integral part of the Reangs clan's daily life. No other Tripuri people are so fond of dance like them. As a result the ***Hojagiri*** folk dance of Reang clan had achieved an unprecedented acclaim all over the world. *Hojagiri* dance had been performed in almost all the leading nations of the world, and where ever it had been performed it had won the hearts of people in folk dances. Shri Satya Ram Reang was awarded Sangeet Natak Academy for his lifelong dedication for preserving, promoting, and coaching the dance by Government of India.

Customs

Most of the disputed and differences are settled by the people of Kotor dofa, that is by the Rai and Kasko of respective sub tribe. It is done through the customary law of the Reangs. Whenever a disputes arise in the between the member of the community, a meeting is called by the Rai. All relevant arguments are heard and then justice is done according to the principle of natural justice. Whatever verdict or punishment is pronounced in the judgment it is implemented with firm hand and payments of penalty etc. are made then and there.

Religious belief and practices

Like other Tripuri people they also belief many god and goddess. The centre figures are those of fourteen gods and goddess of Tripura. Their important festivals are same those of prevailing in Tripura. These are Ker, Gonga mutai, Goria, Chitragupra, Hojagiri, Katangi puja, Lampra wathop. The religious observances are community in nature, and each family has to contribute his part of share of payment. It is called as *Khain.*

All the religious festivals are arranged with the prior meeting of chiefs. In such meetings political, social, and religious matters of importance are discussed and decided by the majority of the meeting.

The deities of the Reangs are similar those of other Tripuri people. These are *Mutai Kotor* or the supreme deity *Subrai, Twima*- the presiding deity of river, *Mailungma* –the goddess of paddy, *Khulungma* -the goddess of cotton, *Goria*- the god of wealth prosperity well being and war, *Kalaia* brother of Goria, *Sangrongma* -the deity of mother earth, *Haichuma*-the goddess of hill, *Burasa* -the god of jungle, *Thunairok* -the god of death, *Bonirok* -the god of evil spirit, *Noksuma* -the goddess of households.

The worship of different deities is similar to the main stream Tripuri people. *Ochai*, the priest performs all the ceremony along with his helper. The green bamboo pole is used as deity in most on the cases. Different types of life stock like fowl, pig, goat, eggs, etc. are offered in the worship. The place of worship is selected outside of the houses where the offerings are dedicated in the names of the deities in front of the wathop, green bamboo pole, the symbol of god. But the *Rangtouk* and *Noksuma* puja is held inside the house only. Two earthen pots are filled with newly grown rice and at top of the pot some oval pebbles collected from huk specially. The pebbles are called the fortune stone. And the pots (*Rondok*) are decorated with the rice powder, vermilion, and garlands. One is named Mailungma, the other as Khulungma.

Rituals on Birth of the baby

On the birth of the baby many pujas are observed. These are Kebengma, Abu suma, Khongkhonok kama, Maitukma etc. for the welfare of the baby. The fowl, prawn, several leaves of trees are needed. When the child grows up special form of worship has to be performed. ***Bukhuksini*** the seven-guardian deities of witches are pleased with sacrifice of a pig, four fowls, and other things beside.

Ceremony on death

The mortal remains are cremated. The obsequy is done in two stages: ***Broksakami*** and ***Kothainami.***

Broksakami

When a person dies his corpse is first bathed with the *Chakhwtwi* that is alkali water or soap, and *Mairangtwi* that is water obtained from the washing of raw rice. After that he is dressed with new clean *Rikutu,* head is dressed with another piece of *rituku* like the headgear and in case of woman, *Rignai* and *Risa.* Then a fowl is sacrificed in front of the feet of the corpse. Later on an earthen pot filled with mean and rice placed at the feat of the deceased and it is followed by dance rituals throughout the night. Rice bear is distributed to all the mourners excepting the family members of the deceased. The next morning the body is laid to rest on pyre and cremated usually near a stream.

Kwthwinami

It is a ritual connected with the respectful and well wishing offering to the manes. *Laotok* or the soul deceased remains under the control of the *sisi manji* , the son of *Buraha* , for a year and it is said that *sisi manji* is the protector of the soul. On the day of the *kathainaimi* the widow of the deceased offers dried rice, meat, fish, fruits, and wine in the name of *Laotok* and *sisi manji* on the *simangnok* , then taking the burnt bones or ashes go to the charinok. It is worshiped for over a period of one year or the

next *hangrai,* when it is immersed in any river or in Gumti River at Dombur, according to the ability of the family. In short the religious culture of the Reang is similar to that of other Tripuri of Tripura.

Reangs in Tripura- A Quantiative Glimpse

According to the survey report of Department of Tribal Rehabilitation in Plantation and Primitive Group Programme (TRP & PTG), 2013 Govt of Tripura and Census of India, 2011, the following information regarding reang community has been recorded. Based on these survey report following table has been made with brief interpretation. It includes distribution of reang community, sex ratio socio-economic status, education, occupation, land holding status etc.

Table - 3.1 : District wise population and Sex ratio of Reang

Name of District	Male (%)	Female (%)	Total (%)	Sex ratio
South	10355 (50.44)	10172 (49.56)	20527 (11.99)	982
Gomati	17174 (50.22)	17019 (49.78)	34193 (19.97)	991
Khowai	1526 (50.01)	1525 (49.99)	3051 (1.78)	999
Dhalai	22751 (49.85)	22882 (50.15)	45633 (26.64)	1005
North	30615 (51.45)	28880 (48.55)	59495 (34.74)	943
Unakoti	4267 (51.08)	4085 (48.92)	8352 (4.88)	957
West	-	-	-	-
Sipahijala	-	-	-	-
TRIPURA	**86688 (50.62)**	**84563 (49.38)**	**171251 (100)**	**975**

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Table 3.1. shows population distribution and sex ratio among reang tribe in Tripura. It was shown that reang concentration was more (35 percent) in North district. After that about 27 percent reang population live in Dhalai district. In the case of sex ratio Dhalai was found highest (1005) which is greater than national and state average. However sex ratio was comparatively low in North district. From the above table it is clear reang people in Tripura, mainly belonged to North, Dhalai and Gomati district and sex ratio of reang is also satisfactory as compared to state and National level.

Table-3.2: Reang Children of (0-6) age group in Tripura

Area	Male	Female	Total	Sex ratio
Rural	16,570 (98.87)	16,020 (98.81)	32,590 (98.84)	966
Urban	190 (1.13)	194 (1.19)	384 (1.16)	979
Tripura	16,760 (100)	16,214 (100)	32,974 (100)	967

Source: Census of India, 2011

Above table represents the child population of reang in the age group of (0-6). It shows more than 98 percent children live in rural areas and only 2 percent found in urban area. It indicates majority of reang were residing in rural area. Table also indicates the child sex ratio of reang community. Child sex ratio was found high in urban area (979) as compared to rural (966).

Table - 3.3 : Main occupation of Reang under different categories

Area	Male	Female	Total
Cultivators	18,991 (53.08)	6,807 (51.08)	25,798 (52.55)
Agricultural labourers	7,097 (19.85)	3,302 (24.78)	10,399 (21.18)
Household Industry	198 (0.56)	216 (1.63)	414 (0.84)
Other work	9,486 (26.51)	3,001 (22.51)	12,487 (25.43)
Total	35,772 (100)	13,326 (100)	49,098 (100)

Source: Census of India, 2011

Above table shows the work types of reang community. Data indicates that more than half of the workers are cultivator. Almost same percentage of male and female were found cultivator. Followed by more than 21 percent were reported they were engaged in agricultural labour work. Interestingly it was recorded that women participation are more in agricultural labour work as compared to men. Rests of the people were doing other types of work.

Table - 3.4 : Marginal worker among Reang

Area	Male	Female	Total
Cultivators	2,072 (23.59)	4,100 (21.55)	6,172 (22.19)
Agricultural laborers	3,992 (45.43)	8,961 (47.1)	12,953 (46.58)
Household Industry	124 (1.41)	921 (4.85)	1,045 (3.76)
Other work	2,598 (29.57)	5,042 (26.5)	7,640 (27.47)
Total	8,786 (100)	19,024 (100)	27,810 (100)

Source: Census of India, 2011

Marginal work type of reang is shown in table-3.4. It exposed majority of marginal workers were doing agricultural labour work and gender participation was found almost same. After that more than 22 percent marginal workers of the respondents were involved in cultivation. Few (4%) of them were doing household industry and rest of the people were doing other kinds of work.

Table - 3. 5 : Literacy rate of Reang

Name of District	Literate	Illiterate	TOTAL
South	15950 (77.70)	4577 (22.30)	20527
Gomati	22024 (64.41)	12169 (35.59)	34193
Khowai	1065 (34.91)	1986 (65.09)	3051
Dhalai	27349 (59.93)	18146 (40.07)	45633
North	42211 (70.95)	17284 (29.05)	59495
Unakoti	5212 (62.4)	3140 (37.6)	8352
TRIPURA	**113331** (66.17)	**57782** (33.83)	**171251** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Table- 3.5 shows the literacy rate of reang tribe. It shows that about 66 percent reang people were literate in Tripura. District wise South was found high (78 percent) in literacy rate. In Khowai district literacy rate was found about 35 percent which is comparatively low in the state. From this table it can be conclude that reang literacy in the state is less satisfactory as compared to state average and also national average.

Table -3.6 : Economic status of Reang

Name of District	APL (Percent)	BPL (Percent)	TOTAL
South	2338 (47.35)	2599 (52.65)	4937
Gomati	2656 (33.52)	5196 (66.48)	7923
Khowai	365 (48.08)	394 (51.92)	759
Dhalai	4413 (39.8)	6674 (60.2)	11087
North	2146 (16.71)	10692 (83.29)	12838
Unakoti	669 (35.17)	1233 (64.83)	1902
TRIPURA	**12587** (31.91)	**26788** (68.09)	**39446** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Above table is about economic status of reang tribe (Table-3.6). It shows about 68 percent people were belonged to BPL category and rest (of the people were belonged to APL category. Majority of BPL holder was found in North district whereas APL holder was found high in Khowai and South district. From the above data it is consider that economic condition of reang is not sound as compared to state and national average.

Table-3.7.1. : Land holding status of Reang

Name of District	Land holder	Landless people	Total
South	9112 (44.39)	11,415 (55.61)	20527 (100.0)
Gomati	10197 (29.82)	23,996 (70.18)	34193 (100.0)
Khowai	779 (25.54)	2,272 (74.46)	3051 (100.0)
Dhalai	10623 (23.27)	35,010 (76.73)	45633 (100.0)
North	13,398 (22.51)	46,097 (77.48)	59495 (100.0)
Unakoti	2,267 (27.14)	6,085 (72.86)	8352 (100.0)
TRIPURA	**46,376 (27.08)**	**1,24,875 (72.92)**	**171251 (100)**

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Above Table - 3.7.1 shows the land holding status of Reang. Most of the (45.0) land holder found in South District. After that majority of land holder were found in Gomati District (30.0) and Unakoti District (27.14). Whereas, most of the landless people were found in North (77.5), Dhalai (77.0) and Khowai (75.0) respectively.

Table-3.7.2. : Types of Land Holding

Name of District	Jote	Khas	Forest	Total land holder
South	2659 (29.18)	2771 (30.42)	3682 (40.4)	9112 (100.0)
Gomati	3929 (38.54)	1778 (17.43)	4490 (44.03)	10197 (100.0)
Khowai	20 (2.57)	0 -	759 (97.43)	779 (100.0)
Dhalai	1620 (15.24)	2124 (19.99)	6879 (64.77)	10623 (100.0)
North	3180 (23.74)	2891 (21.57)	7327 (54.69)	13,398 (100.0)
Unakoti	388 (17.11)	600 (26.48)	1279 (56.41)	2,267 (100.0)
TRIPURA	**11796** (25.43)	**10164** (21.92)	**24416** (52.65)	**46,376** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Above Table - 3.7.2 shows the land holding status of Reang. It indicates District wise *jote, khas* and forest land holder in Tripura. Majority (38.54) jote land holder found in Gomati District. Khas land holder was found high in South (30.42) District. Whereas, forest land holder was found high Khowai District (97.43).

Table - 3.8 : Jhum practicing status among Reang

Name of District	Hardcore	Traditional
South	1011 (4.56)	3869 (24.64)
Gomati	3139 (14.12)	4213 (26.83)
Khowai	747 (3.36)	12 (0.07)
Dhalai	4986 (22.44)	5182 (33.0)
North	10721 (48.23)	2102 (13.38)
Unakoti	1622 (7.29)	328 (2.08)
TRIPURA	**22226** (100)	**15,706** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Table-3.8 depicts the types of jhumia in Tripura. It shows about 48 percent hardcore jhumia were lives in North district. After that about 22.44 percent hardcore jhumia were found in Dhalai district whereas majority of traditional jhumia were found in Dhalai (33 percent) district and then about 27 percent were belonged to Gomati district.

Table- 3. 9 : Status of electricity

Name of District	No. of electrified family
South	3463 (18.28)
Gomati	4853 (25.62)
Khowai	0
Dhalai	4535 (23.94)
North	5225 (27.59)
Unakoti	867 (4.57)
TRIPURA	**18943** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Above Table - 3.9 reveals the status of electricity in Tripura. It shows about 28.0 Reang households were electrified in North District. However, it was found 26.0 in Gomati District. Significantly electrified house was found nil in Khowai District. Even in Unakuti District, electrified house were reported around 5.0 only.

Table-3.10 : Status of IAY house holders

Name of District	IAY House Holders
South	1732 (10.04)
Gomati	4003 (23.22)
Khowai	156 (0.91)
Dhalai	3889 (22.57)
North	6442 (37.37)
Unakoti	1012 (5.89)
TRIPURA	**17234**(100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Table -3.10 shows the status of IAY house holders. It indicates majority (37.37) of IAY beneficiaries was found in North district. Whereas, IAY beneficiarie was found very low in Khowai district (0.91). It can be concluded that IAY house holder is comparatively very less on the basis of BPL family as BPL families were more than 50.0 in every district.

Table-3.11 : Status of *pacca* building owner

Name of District	Pacca building
South	126 (18.47)
Gomati	39 (5.73)
Khowai	0
Dhalai	35 (5.13)
North	234 (34.31)
Unakoti	248 (36.36)
TRIPURA	**682** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Above Table-3.11 depicts the status of *pacca* building holder . It indicates majority (36.36 percent) of *pacca* building holder was found in Unakoti district and it was found nil in Khowai district and it was found only 6.0 in Gomati district and 5.0 in Dhalai district.

Table-3.12 : Status of Govt. job holders

Name of District	Govt. job
South	820 (24.23)
Gomati	609 (17.99)
Khowai	10 (0.29)
Dhalai	668 (19.74)
North	1081 (31.95)
Unakoti	196 (5.8)
TRIPURA	**3384** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Table 3.12 reveals the status of govt. job holder in Tripura. It implies about 32 percent reang people was found govt. job holder in North Tripura. After that 24.23 percent govt. job holder found in South Tripura. Whether, only few (0.29 %) govt. job holder people found in Khowai district.

Table-3.13 : Status of private job holder

Name of District	Private Job
South	51 (7.21)
Gomati	36 (5.08)
Khowai	2 (0.28)
Dhalai	214 (30.23)
North	390 (55.08)
Unakoti	15 (2.12)
TRIPURA	**708** (100)

Source: TW (TRP & PTG) Dept. Govt of Tripura, 2013

Table 3.13 shows the status of private job holder in Tripura. It indicates about 55 percent *Reang* people was found private job holder in North Tripura. After that 30 percent private job holder was found in Dhalai district. Whether, only few (0.28 %) govt. job holder found in Khowai district. From this data it can be confirm that govt. job and private job holder was comparatively high in North district.

4

Health Scenario of Tripura

Health is a prerequisite for human development and is an essential component for the well being of the mankind. The health problems of any community are influenced by interplay of various factors including social, economic and political ones. The common beliefs, customs, practices related to health and disease in circle influence the health seeking behaviour of the community. There is a consensus agreement that the health status of rural population is very poor and being largely unaffected by the developmental processes going on in the country (Keshavamurthy, 2004).

Health finds predominant place in three of the eight goals, eight of the sixteen targets and eighteen of the forty-eight indicators of the "Millenium Development Goals of the UN". Health is the most important social service sector having direct correlation with the welfare of the human being.

The year 2007 marks a mid-way to the Millennium Development Goals (2000-2015) and the fourth year of a Government brought to power on its promise to meet and exceed the Millennium Development Goals through the full implementation of the National Common Minimum Programme. The year 2007 was also marked for the sixtieth anniversary of India's independence. Yet despite the celebrations of 9 percent growth in the "Other India", millions of poorer Indians remain excluded from the most basic rights and subject to the tyranny of mass hunger, illiteracy, and ill-health (Bajpai and Dholakia, 2011).

Table- 4.1 : Comparative health Scenario among selected countries

Country	Health Expend % GDP	Per-Capita Health Spend PPP $	Infant Mortality Rate (per 1000 births)	Maternal Mortality Ratio (per 100,000 live births)	Life Expectancy at Birth in years
India	5.2	91	56	450	63
China	4.7	277	23	45	72
Sri Lanka	4.3	163	12	58	71
UK	8.1	2560	6	8	77
USA	15.4	6096	8	11	75

Source: Access to Healthcare: Challenges and Solutions, July 2010, PricewaterhouseCoopers

The demographic transition is both a challenge and an opportunity for India. The opportunity is that country will have a battery of large productive and reproductive populace. The challenge is to develop synergy between ongoing demographic, educational, economical and technological transitions so that India can hasten population stabilization and rapidly achieve sustainable development (Singh and Singh, 2006).

The structure of the Family Welfare Department, Ministry of Health and Family Welfare, Government of India, New Delhi, is complex and has been built up overtime. New projects and programmes have been added to the original core of family planning programmes for example MCH, CSSM, RCH etc. In the 7th Plan (1984–89) Maternal and Child Health (MCH) component was added with focus on the health needs of women in reproductive age group and children under five in addition to providing contraceptives and spacing services to the desired married couples. Similarly, the Child Survival and Safe Motherhood (CSSM) Programme was launched in 1992 with the assistance from the World Bank and UNICEF to strengthen the maternal and child health component of National Family welfare program. The CSSM included component like management of acute respiratory truck infections, diarrhea care and emergency obstetric services. It was first serious attempt at integrating issues

pertaining to morbidity, mortality and quality of life of pregnant mothers and infants. International conference on Population and Development, 1994 at Cairo recommended that the participating countries should implement unified programmed for RCH. The concept of RCH was to provide the beneficiaries need based, client centered, demand driven high quality and integrated health services handling to population stabilization. The RCH package of India is consisting of (i) prevention and management of unwanted fertility, (ii) management of pregnancy and child birth; (iii) prevention and management of RTI's and STD's; (iv) child survival through immunization, diarrhea and acute respiratory illness control and care to newborn etc. As national population policy, 2000 has assigned important role to community based organizations (Panchayats, NGOs, Youth Clubs, SHGs) for implementation, monitoring and management of the RCH programmes at the grass root level. Village self-help groups are to be utilized to organize and provide basic services for RCH combined with the ongoing Integrated Child Development Scheme. Integrated and coordinated service delivery package for basic health care, family planning and maternal child health related services will be provided at village levels by the community and for the community. The NGOs were also encouraged to participate in the operation of RCH programmes.

Though different initiatives and Govt. programmes had been taken time to time for betterment of reproductive, mother and child health but still there is enough shortage sufficient infrastructures and manpower in developed and developing countries too.

Table -4.2: Shortage of medical manpower

	Doctors per 1000 population	Nurses per 1000 population
India	0.7	0.9
World Average	1.5	3.3
Developing Country Average	1.8	1.8

Source: Access to Healthcare: Challenges and Solutions, July 2010, PricewaterhouseCoopers

Table -4.3: Some indicators related to women from NFHS-3 for some states

State	Very young mothers <19 years	Media n age of mother at first birth	% Children fully Immunized	%Women participate inhousehold decisions	% Mothers received proper postnatal care	%Women experienced spousal violence
Kerala	5.8	22.7	75.3	47.2	87.7	16.4
Tamilnadu	7.7	21	80.9	48.8	89.6	41.9
Bihar	25	18.7	32.8	32.7	15.9	59
Rajasthan	16	19.6	26.5	22.8	29	46.3
Delhi	5	21.7	63.2	52	50.4	16.3
Gujarat	12.7	20.6	45.2	36.6	54	27.6
Indicators for only uneducated women :						
Kerala	*	18.9	*	47.8	*	26
Tamilnadu	*	19.4	78.3	49.7	78.1	52.9
Bihar	35.3	18.3	21.9	35	9.9	63.6
Rajasthan	22.8	19.3	20.5	20.5	19.7	50.4
Delhi	24.6	19.4	44.2	50.4	24.5	28.9
Gujarat	37.9	19.4	27.7	34	36.5	34.3

*Source: NFHS-3 * based on fewer than 25 un-weighted cases*

HEALTH SCENARIO IN TRIPURA :

Tripura, being located in south-west corner of the North-Eastern Region, has suffered due to infrastructure and other bottlenecks, which has adversely affected the economic development of the State. The high incidence of poverty and backwardness are also telling on the health condition of the State. The State is also suffering due to shortage of appropriate health manpower. However, due to concerted efforts made by the State Government, there has been a positive change in the health scenario in recent years.

Besides, National Rural Health Mission (NRHM) is a major partner and in conjugation with the Health Department, has done effective work, especially at the grassroots level, giving the entire health services in the State a major boost. As a result of concerted efforts made by the State Government there is a visible improvement in the health status of the people of Tripura, which can be depicted in the following Table.

Table -4.4 : Health status of Tripura in compare to India

SL.	Items	All India	Tripura
1.	Birth rate	21.4 / 1000	13.7 / 1000
2.	Death rate	7.0 / 1000	4.7 / 1000
3.	Natural growth rate	14.4 / 1000	9.0 / 1000
4.	Infant mortality rate	40 / 1000	26 / 1000
5.	Total fertility rate	2.5	1.7
.6.	Sex ratio	943:1000	960/1000

Source: SRS-2013, ORGI & NFHS-3

Health Infrastructure

National Scenario :

As on 31st March, 2015, there were 153655 Sub Centres, 25308 Primary Health Centres (PHCs) and 5396 Community Health Centres (CHCs) functioning in the country. While the Sub Centres, PHCs and CHCs have increased in number in 2014-15, the current numbers are not sufficient to meet their population norm.

Sub Centres:

There has been and addition of 1329 sub Centres, during the year 2014-15. Significant increases in number of Sub Centres have been reported in states of Gujarat (789) and Madhya Pradesh (428). Percentage of Sub Centres functioning in the Government buildings has increased from 50 percent in 2005 to 67.5 percent in 2015.

Primary Health Centres:

Number of PHCs has increased by 2072 during the period 2005-20015. Significant increase is observed in the number of PHCs in the States of Assam, Bihar, Chhattisgarh, Jammu & Kashmir, Karnataka and Rajasthan. The number of PHCs has increased by 288 during the year 2014-15. Significant increases in the number of PHCs have been observed in the States of Karnataka (120) and Gujarat (89). Number of ANMs at Sub Centres and PHCs has increased from 133194 in 2005 to 212185 in 2015 which amounts to an increases of about 59.3 percent.

Percentage of PHCs functioning in government buildings has increased significantly from 78% in 2005 to 89.5% in 2015. This is

mainly due to increase in the government buildings in the States of Assam, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, and Uttar Pradesh.

The number of allopathic doctors at PHCs has increased from 20308 in 2005 to 27421 in 2015, which is about 35.0% increase. Shortfall of allopathic doctors in PHCs was 11.9% of the total requirement for existing infrastructure.

Community Health Centres:

Number of CHCs has increased by 2050 during the period 2005-2015, - Significant increase is observed in the numer of CHCs in the States of Gujarat, Jharkhand, Kerala, Madhya Pradesh, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

There has been an increase of 33 CHCs from the number reported upto - March, 2014. Significant increase in the number of CHCs is observed in the State of Gujarat (20).

Significant increase in the number of paramedical staff is also observed in - 2015 when compared with the position of 2005. In addition to 4078 Specialists, 11822 General Duty Medical Officers (GDMOs) are also available at CHCs as on 31st March, 2015.

There was huge shorfall of surgeons (83.4%), obstetricians- & gynaecologists (76.3%), physicians (83.0%) and paediatricians (82.1%). Overall, there was a shortfall of 81.2% specialists at the CHCs vis-a-vis the requirement of existing CHCs.

Tripura Scenario:

In Tripura there were 23-Hospitals, 18-Rural Hospitals and community Health Centres, 84- Primary Health Centres, 1101-Sub-Centres/Dispensaries, 8-Blood Banks and 7-Blood Storage centers in allopathic branch during 2013-14 through which the State Government has been providing basic health facilities to the all section of society.

Number of existing sub Centres increased from 146026 in 2005 to - 153655 by March 2015. There is significant increase in the number of Sub Centres in the States of Chhattisgarh, Gujarat, Jammu & Kashmir, Karnataka, Odisha, Rajasthan, Tripura and Uttarakhand.

There are two Medical Colleges in the State. The Agartala Government Medical College (AGMC) is the first medical college in the State, which started in August 2005. Besides, there is a private

Tripura Medical College started under public Private Partnership (PPP) in 2006 named as Dr. B.R. Amedkar Memorial Traching Hospital. Below mentioned table shows the allopathic medical facilities of the State during 2013-14.

Table - 4.5 : District wise allopathic medical facilities

SL No.	Name of Institution	Districts								Total
		West	Sepahijala	Khowai	Unakoti	North	Gomati	South	Dhalai	
1.	State Hospitals*	06	00	00	00	00	00	00	00	06
2.	District Hospitals	00	00	01	01	01	01	01	01	06
3.	Sub-Divisional hospitals	00	02	00	01	01	02	02	03	11
4.	Rural hospitals and CHCs	02	04	02	01	01	03	04	01	18
5.	PHCs	09	09	07	07	14	09	17	12	84
6.	Sub-Centers	203	152	118	80	92	155	164	137	1101
7.	Blood Banks	04	00	00	01	01	01	00	01	08
8.	Blood Bank Centre	00	01	01	00	01	01	02	02	08
9.	Telemedicine centre (Storage)	03	04	02	03	05	03	03	05	28
10.	Vision Centre	05	00	00	00	07	00	12	16	40
11.	Tele Optoamology Centre	11	00	00	00	00	00	00	00	11

Source: Health Department, Tripura (2013-14) * Including ayurvedic and homeopathy

In addition to these facilities, the State Government has been giving thrust to expand and strengthen the homeopathic and ayurvedic system of medical services as a complement to the modern medical facilities especially in the rural area.

The below mentioned table shows the status of homeopathic and ayurvedic medical facilities of the State Government in 2013-14

Table - 4.6: District wise Homeopathic and Ayurvedic institutions as on 2013-14

SL. No.	District	Homeopathic and Ayurvedic Institutions	
		Homeopathic	Ayurvedic
1.	West Tripura	23	13
2.	North Tripura	03	02
3.	South Tripura	12	05
4.	Dhalai Tripura	06	02
5.	Sepahijala	13	05
6.	Khowai	05	05
7.	Gomati	10	04
8.	Unakoti	05	00
Total		**77**	**36**

Source: - Economic Review of Tripura, 2013-14

Moreover, there are one State Homeopathic Hospital and one State Ayurvedic Hospital situated in Tripura.

Table 4.7 : Total number of beds in medical institutions during 2013-14

SL No.	Items	Districts								Total
		West	North	South	Dhalai	Unakoti	Khowai	Sepahijala	Gomati	
1.	Number of beds	1914	280	420	466	355	206	318	429	4388
2.	In Hospitals	1782	150	150	350	275	100	130	350	3287
3.	In PHCs/RHs	132	130	270	116	80	106	118	142	**1094**

Source: - Economic Review of Tripura, 2013-14

Table -4.8 : Total number of patients treated during 2013-14

District	Patients treated		
	Indoor	**Outdoor**	**Total**
West Tripura	6,19,235	29,28,806	35,48,041
North Tripura	1,06,836	6,22,600	7,29,436
South Tripura	2,30,218	4,60,459	6,90,677
Dhalai Tripura	65,125	2,18,879	2,84,004
Total	**10,21,414**	**42,30,744**	**52,52,158**

Source: - Economic Review of Tripura 2013-14

Table - 4.9 : State's performance on family planning during 2013-14

SL. No.	Method	Number
1.	Total sterilisation	5412
2.	Vasectomy	23
3.	Tubectomy	5,389
4.	IUD insertion	984
5.	CC users (Nirodh)	4,47,394
6.	Oral Pill users	97,754

Source: - Economic Review of Tripura, 2013-14

Achievements under National Rural Health Mission (NRHM):

1. Janani Suraksha Yojana (JSY) Scheme: Janani Suraksha Yojana (JSY) is a safe motherhood intervention being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the pregnant women residing in remote rural areas.

Under this scheme, beneficiaries ranging from SC, ST & BPL mothers having two children above the age of 19 years are given cash incentives of Rs.700/- in each case for rural areas and Rs.600/- for urban areas. Those opting for delivery at home are also provided with cash incentive of Rs.500/- under this scheme.

The total beneficiaries under JSY during 2009-10 were 20,402 in the State.

2. Accredited Social Health Activist (ASHA) : ASHA stands for Accredited Social Health Activists, which are selected by and accountable to the Panchayats. ASHAs are placed in every ICDS run Anganwadi Centres of the State. She acts as first port of call to attend any health related intervention in the community. Every ASHA is also a member of Village Health & Sanitation Committees constituted in all 1040 GPs (including ADC villages) and hence, are involved in local health planning for increased access and accountability of health services.

3. Village Health & Sanitation Committee : Out of 1,040 VHSC constituted, 1,011 committees are operational so far with joint accounts of ANM/AWW/ASHA and the Gaon Pradhan. Under NRHM, Untied Funds @ Rs.10, 000/- per annum is provided to each committee to enable undertaking of local health action.

4. Operationalization of Mobile Medical Units: Taking health care to the doorsteps is the principle behind improving access to health care and equitable distribution of health services. Under the National Rural Health Mission provision of Mobile Medical Unit (MMU) in each District is one of the strategies to improve access. Under the initiative, Ramakrishna Mission has been entrusted for operationalizing the Mobile Medical Units (MMU) in West Tripura district. MMUs in

the remaining three districts are being operationalized by the respective Chief Medical Officers.

* Hospital Waste Management under Infection & Environnement Management Plan is implemented through an outsourced agency for effective management of wastes (sharp needles, human/ anatomical waste, toxins, radio-active substances etc.) generated by the PHCs so as to prevent further pollution by air or water.

* Procurement of Diesel Generator Sets have been procured for all categories of Health Institutions for regular power supply and installation of the same has been completed in most of the health institutions.

* Health Management Information System (HMIS) for effective data management leading to better management of health programme, HMIS is implemented in the State.

WOMEN AND CHILD HEALTH INDICATORS :

Birth and Mortality Rate

Special estimates of IMR at the district level were prepared. These estimates show that the IMR in Tripura were 41 and 43 infant deaths per 1,000 live births for males and females respectively. The estimates show higher mortality than the latest SRS estimates (35 for males and 34 for females for 2000–02) for Tripura. District-level estimates indicate that Dhalai had the highest IMR, followed by South, North and West Districts. For girls, IMR was above 50 in Dhalai and South District. Even this was, however, below the all-India IMR of 60 (according to the SRS Bulletin of April 2005). The tribal population has a much lower Infant Mortality Rate (IMR) as compared to the scheduled castes but moderately higher than the other population.

Life expectancy

The expectation of life is the average number of years remaining to be lived by those surviving to that age. The expectation of life at birth is a component of the HDI. As there are no estimates of vital rates (birth rates, death rates, infant mortality rates) at the district level for Tripura, estimates of life expectancy at the district level, for males and females separately, were prepared by adapting available techniques

of indirect estimation to data available for the State. In 2001, life expectancy at birth for males and females in Tripura was 71 years and 74 years respectively. In terms of life expectancy, attainments in Tripura are higher than the national average, which is 61 for males and 62.5 for females (SRS 2003). There is, however, inter-district variation. Women in the West District live five years longer than women in Dhalai, and men in the West District live four years longer than men in Dhalai.

Maternal health care practices

From the inception of pregnancy to its termination, no specific nutritious diet is consumed by women. Maternal mortality was reported to be high among various tribal groups. The chief causes of maternal mortality were found to be unhygienic and primitive practices for parturition. On the other hand, some pregnant tribal women reduced their food intake because of simple fear of recurrent vomiting and also to ensure that the baby may remain small and the delivery may be easier. The consumption of iron, calcium and vitamins during pregnancy is poor. More than 90 per cent of deliveries are conducted at home attended by elderly ladies of the household.

Table- 4.10 : Trends in maternal care indicators

Maternal care indicators for births during the three years preceding the survey, by residence, NFHS-3, Tripura	
Indicator	**Rural Tripura**
Percentage who received antenatal care[1]	78.1
Percentage who had at least three antenatal care visits[1]	56.5
Percentage who received antenatal care within the first trimester of pregnancy[1]	43.5
Percentage of births delivered in a health facility[2]	44.8
Percentage of deliveries assisted by health personnel[2],[3]	45.4

Source: NFHS-3 survey, 2005-2006

1. *Based on the last birth to ever-married women in the three years preceding the survey.*
2. *Based on the last two births to ever-married women in the three years preceding the survey.*
3. *Doctor, auxiliary nurse midwife, nurse, midwife, lady health visitor, or other health personnel.*

From NFHS-3 survey, it is clear that the performance regarding maternal care in Tripura was moderate.

Table 4.11 : Knowledge of contraceptive methods

Percentage of all women and men, currently married women and men, and never married women and men who know any contraceptive method, by specific method and residence, Tripura, 2005-06		
	All women	Currently married women
Any method	97.6	99.2
Any modern method	97.5	99.1
Female sterilization	93.3	97.4
Male sterilization	70.3	80.7
Pill	94.9	97.6
IUD	63.6	75.9
Injectables	61.3	68.3
Condom/Nirodh	77.2	82.1
Female condom	9.4	11.0
Emergency contraception	34.5	39.1
Other modern method	0.0	0.0
Pill, IUD, and condom[1]	57.3	69.0
Any traditional method	72.6	86.9
Rhythm	62.0	74.5
Withdrawal	59.5	74.4
Folk method	5.4	5.9
Mean number of methods known by respondents age 15-49	6.3	7.1
Number of respondents age 15-49	1,570	1,106

Source: NFHS-3 survey, 2005-2006

From NFHS-3 survey, it indicates that women in Tripura were quite aware regarding contraceptive using method.

Table- 4.12 : Source of modern contraceptive methods in Rural Tripura

Percent distribution of current users of modern contraceptive methods by most recent source of the method, according to residence, Tripura, 2005-06.			
Most recent source of method	Female sterilization	Pill	Condom/ Nirodh
Public medical sector	98.5	24.5	35.3
Government/municipal hospital	46.2	2.3	8.8
Government dispensary	1.2	9.1	17.6
CHC/rural hospital/PHC	34.9	4.5	8.8
Sub-centre/ANM/camp	14.9	3.2	0.0
Other public medical sector	1.5	5.5	0.0
NGO or trust hospital/clinic	0.5	0.0	0.0
Private medical sector	1.0	61.8	44.1
Private hospital	0.0	0.0	0.0
Private doctor/clinic	1.0	0.5	0.0
Pharmacy/drugstore	0.0	60.0	44.1
Other private medical sector	0.0	1.4	0.0

Source: NFHS-3 survey, 2005-2006

Above table depicts the source of modern contraceptive methods in rural area of Tripura. It indicates in Tripura female sterilization was mostly used by different govt. sources as well as people of Tripura also using condom or nirodh from govt. and private sector.

Table - 4.13 : Delivery and postnatal care

Delivery and postnatal care descriptors	Tripura (Rural)
Place of delivery	
Health facility	42.9
Public sector	39.9
NGO/trust	-
Private sector	3.0
At home	56.7
Own home	51.4
Parents' home	4.9
Other home	0.4
Other	0.4
Total	100.0

NFHS-3 Survey, 2005-2006

Delivery and postnatal care descriptors	Tripura (Rural)
Assistance during delivery[1]	
Doctor	41.3
ANM/nurse/midwife/LHV	3.2
Dai (TBA)	38.7
Friends/relatives	14.0
Other	0.4
No one	2.0
Don't know/missing	0.4
Total	100.0

NFHS-3 Survey, 2005-2006

1. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

CHILD HEALTH CARE PRACTICES

Tripura has made remarkable progress in Routine Immunization by increasing coverage throughout the State. As per the National Immunization schedule of Govt. of India, Routine Immunization is carried out in the State including ADC area to cover all children in the age group of up to 1 year. There are vast differences in the health status of mothers and children between tribal and non-tribal populations. Compared to the NFHS 2 survey, the infant mortality, under-five mortality, and neonatal mortality have decreased; the proportion of home deliveries is at a standstill. There was a fall in the median months of exclusive breastfeeding, while it had shown improvement among others from 1.3 months to 1.9 months. The total fertility rate had shown a slight increase compared to the NFHS 2 survey.

Table - 4.14 : Feeding Practices for Children

Indicator	South Tripura		North Tripura	
	Total	Rural	Total	Rural
Children Breastfed within one hour of birth (%)	37.9	38.9	45.5	45.8
Exclusive breastfed of children upto 6 months (%)	13.9	14.6	3.6	4.0
Children receive solid or semi solid food (6-24 months) and still being breast breastfed (%)	90.8	90.5	92.0	93.9
Children received at least one dose of vitamin A (9-35 months)	57.5	55.9	58.0	55.6
Children received three doses of vitaminA (above 21 months)	20.9	21.1	35.9	37.7

DLHS-3, 2007-08

This table reflects that child feeding practices of mothers among the dwellers of the both district are recommendable.

Table - 4.15 : Early childhood mortality rates in Rural

Neonatal, post-neonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey by residence in Tripura, 2005-06 and for 0-4 years before NFHS-2 and NFHS-1 in Tripura					
Years preceding the survey	**Neonatal mortality (NN)**	**Postneonatal mortality1 (PNN)**	**Infant mortality (1q0)**	**Child mortality (4q1)**	**Under-five mortality (5q0)**
0-4	36.3	(18.9)	(55.2)	(8.2)	(63.0)
5-9	48.0	21.7	69.8	25.3	93.3
10-14	56.1	18.4	74.6	27.2	99.8

( ) Based on 250-499 unweighted cases.

* *Rate not shown; based on fewer than 250 unweighted cases.*

1 Computed as the difference between the infant and neonatal mortality rates.

Sex ratio

The sex ratio (or ratio of females to 1,000 males) is a simple indicator of gender equality. Among the countries of the world, India is unique in that the data show a decline in sex ratios in the twentieth century. Tripura, however, does better than the national average both in terms of the absolute value of and trends in sex ratio. In 2001, the overall sex ratio was 948 (946 in rural Tripura and 959 in urban Tripura), while the corresponding ratio for India was 933. The sex ratio among the major tribes was higher than the State average. The sex ratio among SC, though lower than among ST, was higher than the State average in both rural and urban areas. The child sex ratio (or sex ratio among children aged 0–6 years) was 966 as compared to the Indian average of 927. The child sex ratio was greater than 1,000 – a very favourable outcome – in four blocks, and above 990 in another four blocks. However, there was a small decline in the child sex ratio in South District and Dhalai in the 1990s.

Table - 4.16 : Marriage & Fertility

Indicator	South Tripura		North Tripura	
	Total	Rural	Total	Rural
Sex Ratio at Birth	101	101	101	103
Percentage of girls marrying before completing 18	28.6	30.8	14.3	16.2

DLHS-3, 2007-08

Table - 4. 17 : Sex Ratio among Scheduled Tribes by residence: 2001 – 2011

State	Sex Ratio among Scheduled Tribes by residence : 2001 - 2011					
	Sex Ratio-2001			Sex Ratio– 2011		
	Total	Rural	Urban	Total	Rural	Urban
Tripura	970	971	921	983	982	1,017

Source: Census of India,2011

Some of the basic indicators of the demographic and health status of a population are the total fertility rate, crude birth rate, natural growth rate, crude death rate, neonatal death rate, infant mortality rate and under-5 mortality rate. Some indicators like total fertility rate, Tripura performs far better than all other states of North-East India. Age at marriage is an important factor in determining women's health particularly since it is an important factor in determining the age of first pregnancy. The mean age at marriage of tribal women in Tripura 20 year (Year Book, 2010) was higher than the national figure (19.7 %). This improvement is related to enhancement in literacy rates both in urban as well as in rural areas. The incidence of child marriage was lower among the tribal population than among the non-tribal population. Therefore the understanding of tribal identity dynamics in Tripura is important as so many inter-community relations and socio-economic development are intimately connected to the question of identity, which belongs to where in the regional ethno-cultural scheme. Tribal identity or ethnicity is a community level consciousness and solidarity.

Tribal women are still lacking behind in comparison with their class sisters which may be due to illiteracy, lack of awareness, lack of financial support etc. Though the empowerment of tribal women is in

steady progress, an immediate action by the government, society and tribal community is very necessary to empower the tribal women. In spite of the government taking initiative steps in improving the living condition of the tribals, but in reality the tribals are still lacking in many facilities such as drinking water, proper sanitation, primary health center, pucca road, nutritional food security and quality education. It is in the hand of the government and people who are in-charge of the various schemes to make the facilities provided beneficial for the tribals of Tripura.

Child bearing imposes additional health needs and problems on women -physically, psychologically and socially. Maternal mortality was reported to be high among various tribal groups. The chief causes of maternal mortality were found to be unhygienic and primitive practices for parturition. From the inception of pregnancy to its termination, no specific nutritious diet is consumed by women. On the other hand, some pregnant tribal women reduced their food intake because of simple fear of recurrent vomiting and also to ensure that the baby may remain small and the delivery may be easier. The consumption of iron, calcium and vitamins during pregnancy is poor. The habit of taking alcohol during pregnancy has been found to be usual in tribal women and almost all of them are observed to continue their regular activities including hard labour during advanced pregnancy. More than 90 per cent of deliveries are conducted at home attended by elderly ladies of the household. No specific precautions are observed at the time of conducting deliveries which resulted in an increased susceptibility to various infections. Services of paramedical staff are secured only in difficult labour cases (Debbarma, 2012).

Generally, a balanced diet provides all the food substances needed by the body for healthy growth and development. Good nutrition also includes eating the proper amount of food each day. It helps keep the body healthy and fit. When they are not able to get two meals a day, how is the concept of nutritious food applicable to them.

Table - 4.18 : Food group-wise mean intake per adult consumption unit as a percentage of the Recommended Daily Allowance (RDA), Tripura and selected villages of West District

Food group	Percentage of Recommended Daily Allowance		
	Tripura, 1998	Village survey, 2005	
	Overall	Non-tribal Sachindra Nagar	Tribal Kaichand Bari
Cereals and millets	102.2	109.0	102.3
Pulses and legumes	140.6	109.7	27.0
Leafy vegetables	129.7	75.3	108.7
Roots and tubers	125.2	32.1	92.4
Other vegetables	165.9	180.9	135.1
Milk and milk products	36.5	22.7	4.0
Fats and oils	63.4	92.5	20.0
Sugar and jiggery	29.8	128.4	1.2

Source: GOI (1998), District Nutrition Profile, and Chakravarty (2006).

The above table reflects the intake nutrition among tribal & non-tribal people of Tripura as per Recommended Daily Allowances.

As far as child care is concerned, both rural and tribal illiterate mothers are observed to breast-feed their babies. But, most of them adopt harmful practices like discarding of colostrum, giving prelacteal feeds, delayed initiation of breast-feeding and delayed introduction of complementary feeds. Vaccination and immunization of Infants and children have been inadequate among tribal groups. In addition, extremes of magico-religious beliefs and taboos tend to aggravate the problems.

Northeast India including Tripura is very rich in plant and herbs because of plenty of rainfall and availability of deep forest. Tripura is a small hilly state in northeastern region of India surrounded by Bangladesh in three (3) sides of the state. Out of total population of 36, 71, 032; 27 percent comprises of schedule tribes. In recent year this state has divided into eight districts. The rich endowment of edible

resources in forest kept the tribes of Tripura confirmed in living traditionally in forest areas. Some of the basic indicators of the demographic and health status of a population are the total fertility rate, crude birth rate, natural growth rate, crude death rate, neonatal death rate, infant mortality rate and under-5 mortality rate. Some indicators like total fertility rate, Tripura performs far better than all other states of North-East India.

5

WOMEN AND CHILD HEALTH

PART-I
Family Background

Table -5.1 : Family Size

No. of Member/family	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
1-4	108	72.48	80	53.34	188	62.88
5-7	41	27.52	57	38.00	98	32.78
8 and above	-	-	13	8.66	13	4.34
Total	149	100	150	100	299	100.0

Source : Field survey 2013

Table -5.2 : Mean Family size

District	No. of Household	Total family member	Mean family size
South	149	591	3.96
North	150	721	4.80
Overall	299	1312	4.38

Source : Field survey 2013

Table- 5.1 & 5.2 is about the family size of respondents. It is shown that about 63 percent people were belongs to small family (1-4 member). It was found high in South district (72 percent) as compared to North (53 percent). Whereas 33 percent respondents reported, they belonged to 5-7 members' family. It was recorded high in North district as compared to South. Even 9 percent

respondents found in North district those belonged to above 8 members of family.

This is going to consider that average family size is comparatively bigger in North district (4.8) than South district (3.96).

Table 5.3 : Sex ratio among Respondent's Family

District	No. of Household	No. of Male	No. of Female	Total family member	Sex ratio
South	149	296	295	591	996
North	150	354	367	721	964
Overall	299	650	662	1312	982

Source : Field survey 2013

Table-5.3 deals with the sex ratio in the study area. Sex ratio is one of significant indicator for development in general and reproductive and child health (RCH) in particular. In both the districts, sex ratio found to be higher than State and national figure. But comparatively sex ratio was recorded high in South Tripura district than North.

Table- 5.4 : Educational Status of Respondent's family

Educational status	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Illiterate	97	16.41	59	8.18	156	11.9
Literate	69	11.68	123	17.05	192	14.63
Primary (I-V)	89	15.05	175	24.27	264	20.12
Upper Primary (VI-VIII)	65	11.0	115	15.96	180	13.71
Secondary (IX-X)	156	26.39	130	18.03	286	21.8
Higher Secondary (XI-XII)	56	9.48	52	7.21	108	8.23
Graduate	28	4.74	24	3.32	52	3.97
Post Graduate	04	0.68	06	0.85	10	0.76
Infant	27	4.57	37	5.13	64	4.88
Total	591	100.0	721	100.0	1312	100.0

Source: Field Survey 2013

Table-5.4 indicates the educational status of respondent's family. About 20 percent respondent's family had studied up to primary level. It was found high in North district as compared South. About 22 percent of respondent's families had completed high school level. It was recorded high in South district. However higher secondary and graduate level passed also found high in South as compared to North. Whether literate, primary and elementary level people were found more in North district as compared to South. It is clear that illiteracy rate was more in South district. On the other hand educational status of primary, elementary level category was quite better in North district whereas in South district H.S and college level education was batter.

Table - 5.5 : Main Occupation of Respondent family

Main Occupation	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Agriculture	53	35.58	24	16.00	77	25.75
Business	7	4.69	11	7.34	18	6.02
Service	11	7.38	41	27.33	52	17.39
Labour	78	52.35	74	49.33	152	50.84
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.5 shows the main occupation of the respondent's family. More than 50 percent respondents were wage labours. There was no marked difference between two districts. While almost 26 percent family were farmers. It was reported high in South district (36 %) as compared to North (16 %). More than 17 percent family was involved in service sector. It was higher in North district (27.33 %) in compared to South (7.38 %) and rest of the people was engaged in business activities.

It indicates most of the people were dependent on agriculture sector and labour sector in South district, whereas in North district majority were involved in labour sector and then a major portion was involved with service and agriculture sector.

Table- 5.6: Economic category of respondent Family

Category	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
APL	81	54.37	68	45.34	149	49.84
BPL	53	35.58	46	30.67	99	33.11
Listed BPL	3	2.01	04	2.66	07	2.34
Annapurna	3	2.01	03	2.00	06	2.00
Antodaya	5	3.35	19	12.67	24	8.02
No ration card	4	2.68	10	-	14	4.69
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Economic category of respondents is shown in Table-5.6. About 50 percent respondents admitted that they were APL card holder. It was found high in South district as compared to North. About 33 percent BPL respondents was found in study area and it was also reported high in South as compared to North. But almost 13 percent respondents were found in North district having 'antodaya' card. But it was found very less in South district.

Table -5.7: Monthly income of respondent family

Income /month	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Less than 5000	86	57.72	92	61.34	178	59.54
5001-10000	46	30.88	21	14.00	67	22.41
10001-15000	07	4.69	15	10.00	22	7.36
15001-20000	05	3.36	16	10.67	21	7.02
20001-25000	03	2.01	04	2.66	07	2.34
25001-above	02	1.34	02	1.33	04	1.33
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.7 implies the monthly income range of respondent family. About 60 percent respondents reported that their monthly income range was between Rs. 1000 - Rs.5000. There was no marked difference between two districts, followed by about 22.41 percent admitted that their family's monthly income range was between Rs. 5001- Rs. 10000. It was reported higher in South (31 %) district as compared North (14 %). But under 10000-15000 income ranges 10 percent were found in North district whereas it was found just 5 percent in South district. Even 11 percent of North respondents said that their monthly income range was 15001-20000 whereas, it was just 3 percent in South district. This is going to consider that higher income group of people was found high in North district whereas, lower income group people was high in South district.

After analyzing the data it is consider that percentage of BPL (Below Poverty Line) card holder is slightly more in South district, but in overall status economic condition of respondents is quite better in South district compare to North.

Table - 5.8: Average annual expenditure of respondent family

Particulars	South District		North District		Total	
	Amount (In Rs)	Percent	Amount (In Rs)	Percent	Amount (In Rs)	Percent
Food	11,143	23.53	22,676	44.93	16909.5	34.57
Cloths	4,339	9.15	3,527	6.99	3933.0	8.03
Traditional medicine	1,007	2.12	583	1.15	795	1.63
Doctor medicine	4,845	10.22	2,658	5.26	3751.5	7.67
Education	5,812	12.26	9,801	19.41	7806.5	15.96
Transport	3,427	7.23	2,821	5.59	3124.0	6.38
House making/repair	6,523	13.78	2,951	5.86	4737.0	9.69
Social function	1,272	2.69	1,159	2.29	1215.5	2.48
Religious function	1,723	3.64	1,433	2.84	1578	3.22
Consumer durable	1,708	3.61	1,107	2.19	1407.5	2.88
Cash expense. For own production	5,571	11.77	1,766	3.49	3668.5	7.49
Total	47,370	100.0	50,482	100.0	48,926	100.0

Source: Field survey 2013

Average annual expenditure of respondent's family is shown in table-5.8. The respondents were reported that they were expensed about 35 percent of total expenditure for food purpose annually. But this amount was very less in South (23.53 %) as compared to North (45 %). About 16 rupees they were expense on education purpose. It was recorded high in North district as compared South. About 10 percent rupees were expensed for house making/repairing. It was reported high in South (14 %) as compared to North (6 %). Interestingly respondents of North district were expensed more on food purpose (45 %) and then education purpose (19 %). But respondents of South district were expensed less in food (24 %), education (12%) as compared to North. Whereas, South district people expensed more in 'cloth' purpose (9 %) and then doctor medicine (10 %). Interestingly it is going to confirmed that North Tripura people have expenses their money maximum on food consumption and education purpose whereas, South Tripura people expenses more on cloths, doctor medicine, education.

Table -5.9 : Land-holding Pattern

District	Land holding status					
	Living in own land	Living in other land	Total	Owner of Agri. land	Without Agri. land	Total
South	140 (94.0)	9 (6.0)	149 (100.0)	97 (65.0)	52 (35.0)	149 (100.0)
North	132 (88.0)	18 (12.0)	150 (100.0)	111 (74.0)	39 (26.0)	150 (100.0)
Total	272	27	299	208	91	299
Percentage	90.97	9.03	100.0	69.57	30.43	100.0

Source: Field survey 2013

Table-5.9. revealed the land holding status of respondents. It is viewed majority (91%) of respondents had been living at their own land. It was reported high in South district as compared to North district. Almost 70 percent family had their own agricultural land. It was recorded high in North district. While few (6 %) were found those are living in other land and good amount (30.43 %) of people are Agricultural landless. It was found high in South (35 %) as compared to North (26 %).

Table -5.10 : Housing type

Types	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Pacca	12	8.05	14	9.33	26	8.7
Kachha/Mud	74	49.67	74	49.34	148	49.5
Thatched	13	8.73	09	6.00	22	7.35
Mixed	40	26.84	36	24.00	76	25.42
Tin	10	6.71	17	11.33	27	9.03
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.10. shows the housing status of respondents. It is viewing about 49 percent of the people living in 'kachha or mud' house. It was reported same in both districts. Followed by about 25 percent was living in 'mixed' house. It was found slightly high in South district. 9 percent respondents were admitted that their houses constructed by 'tin'. It was found higher in North district (11.33 %) as compared to South (7 %). Even '*pacca*' house owner was also found little bit high in North district. It is going to consider that housing condition of respondents family is quit better in North Tripura as compared to South Tripura.

Table-5.11 : Sanitation type

Sanitation type	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Open	51	34.23	40	26.67	91	30.43
Pit	76	51.00	94	62.67	170	56.86
Pacca	22	14.77	16	10.66	38	12.71
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.11. illustrates the sanitation hygiene of respondent's family. It was shown majority (57 %) of people were using 'pit' type of latrine. It was found high in North district as compared to South. While 30 percent respondents reported that they were still depend on 'open defecation system' which is very unscientific for society. It was recorded very high in South district (34 %) compared to North (27 %). Rest (13 percent) of the respondents were using 'pacca'

latrine. It was reported high in South district (15 %) compare to North (11 %). Above data was going to consider that sanitation condition was quite better in North district as compared to South.

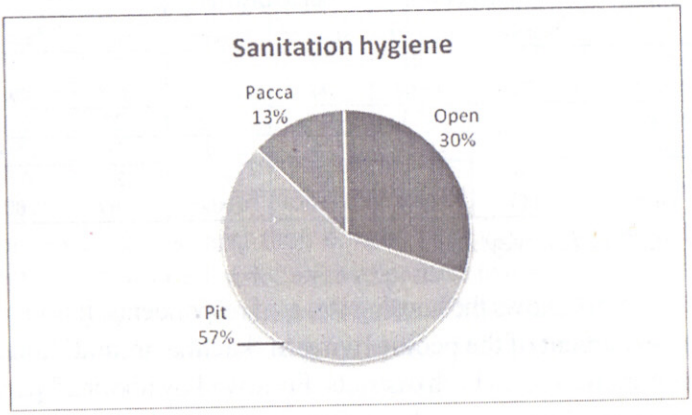


Figure: 5.11

Table-5.12: Drinking water source

Source	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Tap water	87	58.38	17	11.33	104	34.79
Hand pump	38	25.5	101	67.34	139	46.49
Dug well	20	13.42	19	12.67	39	13.05
Pond/lake	02	1.34	13	8.66	15	5.01
Spring	01	0.67	-	-	01	0.33
Stream	01	0.67	-	-	01	0.33
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.12. presents the drinking water source of respondents. It shows 46.49 percent villagers were depending on hand pump for drinking water source. It was reported very high in North district (67 %) compared to South (26 %). Followed by 35 percent respondents were using tap water. It was recorded very high in South district (58

%) compared to North (11 %). Rests of the people are using dug well, pond, spring, stream etc. Above information are considered people of South mainly depending on 'tap water' whereas majority of respondents from North mainly depend on 'hand pump'. Therefore water source was much better in South district than North.

Table-5.13: Type of cooking device

Types	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Mud chullah	116	77.86	117	78.00	233	(77.93)
Electric stove	11	7.38	04	2.66	15	(5.01)
Gas stove	22	14.76	29	19.34	51	(17.06)
Kerosene stove	-	-	-	-	-	-
Total	149	100	150	100	299	(100)

Source: Field survey 2013

Table-5.13. depicts the types of cooking device of respondent's family. It is presenting majority (77.93%) of people were using mud *chullah* as a cooking device. After that 17.06 percent were found who were using gas stove and rest of them (5.01%) were having electric stove also.

District scenario, mud *chullah* users were more or less same (South-77.86%, North-78.00%) in both. Whereas electric stove users were more (7.38%) in South than North (2.66%) Tripura. But in the study area of North 19.34 percent gas stove users were found whether it was 14.76 percent in South Tripura.

Table-5.14: Using status of various housing durable

Durables	South District			North District			Total		
	Number & percent			Number & percent			Number & percent		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Electricity	90 (60.4)	59 (39.6)	149 (100)	125 (83.34)	25 (16.66)	150 (100)	215 71.91	84 28.09	299 (100)
Solar light	13 (8.72)	136 (91.28)	149 (100)	10 (6.67)	140 (93.33)	150 (100)	23 7.69	276 92.31	299 (100)
Separate kitchen	113 (75.83)	36 (24.17)	149 (100)	111 (74.00)	39 (26.00)	150 (100)	224 74.92	75 25.08	299 (100)
Separate house for domestic animal	105 (70.47)	44 (29.53)	149 (100)	115 (76.67)	35 (23.33)	150 (100)	220 73.58	79 26.42	299 (100)
Using TV	66 (44.29)	83 (55.71)	149 (100)	95 (63.34)	55 (36.66)	150 (100)	161 53.85	138 46.15	299 (100)
Mobile	70 (46.97)	79 (19.46)	149 (100)	92 (61.34)	58 (38.66)	150 (100)	162 54.18	137 45.82	299 (100)
Vehicle	25 (16.77)	124 (83.23)	149 (100)	25 (16.66)	125 (83.33)	150 (100)	50 16.73	249 83.27	299 (100)
Bank account	104 (69.8)	45 (30.2)	149 (100)	76 (50.67)	74 (49.33)	150 (100)	180 60.21	119 39.79	299 (100)

Source: Field survey 2013

Table-5.14. reveals the using status of various household durable. It shows 71.91 percent respondent's house were electrified while 28.09 percent people were living without electricity. In district level 83.34 percent people was found whose houses are electrified whereas 60.4 percent people were using electricity in South district. So electrification is comparatively good in North district than South.

Table also shows the solar light using status. It is showing few (7.69%) people were using solar light while majority (92.31%) of respondents doesn't have any solar light system. But district level more or less same users were found those are using solar light.

Table-5.14. depicts the separate kitchen status. Most (74.92%) of the respondents were cooking in separate kitchen whereas till now 25.08 percent people didn't have any separate kitchen. District level status was more or less same.

Table also describes the separate housing condition for domestic animals. It is viewing that 73.58 percent people were having separate house for domestic animals. In district level scenario, North was somehow better (76.67%) than South district (70.47%) in the same.

Above table also shows the television users status of respondents. It is clear that till 46.15 percent don't have any TV which is very huge rate in this modern era. 63.34 percent TV users were found in North district while only 44.29 percent TV users found in South district.

As well as 54.18 percent respondent were using mobile phone. Maximum (61.34%) mobile users were found in North while 46.97 percent was found in South district. So it is clear, maximum TV and mobile users found in North district.

Table also expresses the vehicle users status of respondents. Most of the (83.27%) people didn't have any vehicle. In district level vehicle users were more or less same.

Above table is showing bank account holders status of respondents. 60.21 percent people were having bank account. At district level, 69.8 percent bank accountholders were found in South while 50.67 percent were in North Tripura. South district is better than North on the basis of bank account holding status.

Table-5.15: Major health problem of respondent family members

a.Temporary diseases*

Types	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Cough	267	45.17	424	58.8	691	52.66
Fever	331	56.0	432	59.91	763	58.15
Diarrhoea	19	3.21	70	9.7	89	6.78
Accident	02	0.33	08	1.1	10	0.76
Malaria	42	7.10	70	9.7	112	8.53
Hepatitis	02	0.33	04	0.55	06	0.45
Diabetes	04	0.67	03	0.41	07	0.53
Other	62	10.49	18	2.49	80	6.09
No/Nil	35	5.92	135	18.72	170	12.95
Total member	**591**		**721**		**1312**	

Source: Field survey 2013 **Multiple response*

Table-5.15.a. revealed the temporary diseases among members of respondent's family. It is confirmed majority (58.15%) of people were facing fever followed by that almost 53 percent were facing by cough problem. After that few (8.5%) were facing malaria and rest of them (7%) were suffering by diarrhoea problem.

District wise comparison, cough (45.17%) and fever (56%) effects very much in South district as well as it was recorded 59 percent and 60 percent in North in the same. Remarkably diarrhea (10%) and malaria (10%) patients was more in North while it was 3.21 percent and 7.1 percent in South district.

From this data we can consider that people were mainly suffering by cough and fever in South district as well as North district also. But diarrhea and malaria effected very much in North district.

b.Chronic diseases*

Types	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Tuberculosis	05	0.84	02	0.27	07	0.53
Bronchitis	09	1.52	01	0.13	10	0.76
Joint Pain	56	9.47	22	3.05	78	5.94
Abdominal Pain	33	5.58	15	2.08	48	3.65
Cancer	01	0.16	-		01	0.07
Disability	01	0.16	05	0.69	06	0.45
Blood pressure	33	5.58	05	0.69	38	2.89
Skin disease	08	1.35	04	0.55	12	1.04
HIV/AIDS/STD	01	0.16	07	0.97	08	0.91
Other specify	123	20.81	-	-	123	9.37
No problem	215	36.37	605	83.91	820	62.5
Total member	**591**		**721**		**1312**	

Source: Field survey 2013 **Multiple response*

Table-5.15.b. exposed the chronic disease status condition of respondents. It is showing majority (62.5%) of respondents have no chronic disease and it was found very high in North district (84%) than South district (36.37%). Rest of them were suffering by joint pain (6%), abdominal pain (4%) and little bit (3%) were found blood pressure patients.

But district level comparison 9.47 percent people were suffering by joint pain in South district while it was 3.05 percent in North. On the other hand some people mostly in South district facing by tuberculosis (0.84%), bronchitis (1.5%), and abdominal pain (5.5%), while it was found less in North district (0.53%, 0.76% and 3.65%). But 0.91 HIV patients were found in North which was 0.0.16 percent in South district.

It is clear people of South district mostly facing by chronic diseases especially joint pain, blood pressure, abdominal problem etc. compare to North district. Whereas HIV affected patients was found high in North compare South district.

c. Disability status

Disabilit	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	06	1.01	08	1.10	14	1.06
No	585	98.99	713	98.9	1298	98.94
Total member	**591**	**100.0**	**721**	**100.0**	**1312**	**100.0**

Source: Field survey 2013

Table-5.15.c. about the disability status of respondents' family. It is exposing few (1.06%) person were found disable and rest (98.94%) of the people's didn't have any disability. District level status more or less same percentages of disable are found in South (1.0%) and North (1.10%). There was no marked difference between two districts in this regard.

d. Source of medicine

Sources	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Government Hospital /National Rural Health Project	109	73.15	91	60.67	200	66.89
Other than Govt. hospital	40	26.85	59	39.33	99	33.11
Total family	**149**	**100.0**	**150**	**100.0**	**299**	**100.0**

Source: Field survey 2013

Table-5.15.d. depicting the sources of medicine used by the respondents. It was found that, most (67 %) of the people were collecting medicine from government hospital. It was recorded high in South district (73.15 %) as compare to North (60.67 %). Followed by 33.11 percent people were collecting medicines from other than Govt. hospital. It was reported comparatively high in North district (39.33 %).

e. Treatment type

Type	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Herbal	78	13.19	09	1.24	87	6.64
Witch Craft	03	0.5	-	-	03	0.22
Spiritual Healers	15	2.55	01	0.13	16	1.21
Modern method	16	2.72	504	69.91	520	39.65
Not specified	479	81.04	207	28.72	686	52.28
Total member	**591**	**100.0**	**721**	**100**	**1312**	**100**

Source: Field survey 2013

Table-5.15.e reveals the treatment type of respondents. More than 50 percent respondents view was there are no specific types of treatment. Whereas 39.65 percent were found those were taken modern method treatment followed by almost 7 percent were taken herbal treatment. Rests of the people were taken spiritual healers and witch craft type of treatment.

Majority of South district people's treatment types are not specific. More than 13 percent were using herbal treatment. In North district about 70 percent were reported that, they were using modern treatment method.

It is consider from the above data, Reang people of North district were mostly using modern treatment while most of the people of South don't specify any particular method of treatment.

PART-II

General Profile of Respondent's Women And their Health Status

Table-5.16: Age Distribution of Women

Age group	Tripura				Total	
	South district		North district			
	Number	Percent	Number	Percent	Number	Percent
Below 18 years	-	-	-	-	-	-
18-25 years	23	15.43	14	9.33	37	12.37
26-35 years	56	37.59	50	33.34	106	35.45
36-45 years	45	30.21	43	28.67	88	29.43
46-55 years	20	13.42	30	20.00	50	16.73
56-65 years	5	3.35	12	8.00	17	5.69
66 years & above	-	-	01	0.66	01	0.33
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.16. depicts the age group of respondent women. About 35 percent of respondent women consisted of the age group of 26-35 years. There were no marked variations among two districts. About 30 percent belonged to the age group of 36-45 years. Interestingly no respondents were found below 18 years of age. 12 percent were found under the age group of 19-25 years. Taken this 3 together, it comes to more than two-third share. It was found slightly higher in South as compared to North district.

Table-5.17: Educational Status of women

Educational status	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Illiterate	53	35.58	24	16.00	77	25.76
Literate	19	12.75	47	31.34	66	22.07
Up to Primary	24	16.11	38	25.33	62	20.74
Elementary	9	6.04	19	12.67	28	9.36
High School	35	23.48	21	14.00	56	18.73
H.S	7	4.69	01	0.66	08	2.68
Graduate	2	1.34	-	-	02	0.66
Post Graduate	-	-	-	-	-	-
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.17. revealed the educational status of respondent's women. About 27 percent respondents were found illiterate. It was found very high in South (36 percent) district as compared to North (16 percent). About 21 percent of respondents were completed primary level. It was recorded high in North district. However higher secondary and graduate level passed also found high in South district as compared to North. Whether literate, primary and elementary level people were found more in North district as compared to South. It is clear that illiteracy rate wes more in South district. On the other hand educational status of primary, elementary level category was quite better in North district whereas in South district H.S, higher secondary & college level qualified is good.

Table-5.18: Marital Status of women

Marital status	Tripura				Total	Percentage
	South District		North District			
	Number	Percent	Number	Percent		
Married	146	97.98	147	98.00	293	97.99
Un married	-	-	-	-		
Divorce	2	1.35	-	-	2	0.68
Separated	-	-	-	-	-	-
Widow	1	0.67	03	2.00	4	1.33
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.18. deals with the marital status of respondent's women. Around 98 percent respondents were found married. Rest of them are divorced or separated.

Table-5.19: Age at Marriage of women

Age at marriage	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Below 16	41	27.52	22	14.67	63	21.07
16-20	66	44.29	76	50.66	142	47.49
21-25	34	22.82	38	25.34	72	24.08
25 above	08	5.37	14	9.33	22	7.36
Total	149	100	150	100	299	100
Mean age	18.58		19.88		19.23	

Source: Field survey 2013

Table-5.19. is exposing the age at marriage of respondent women. It indicates majority (47.49%) of women were married in the 16-20 age groups. Followed by about 21 percent were married below the age of 16 years, which was treated as early marriage. Rests of the (24.08%) respondents are married in the 21-25 years of age groups.

Early marriage of women were found more in South (27.52%) while it was reported about 15 percent in North district. But more or less same majority of women were married under the 16-20 age groups in both South (44.29%) and North (50.66%) district.

It is easy to declare that trend of early (below 16) marriage was more in South district which is not good for society whereas trend of upper age group (16-20, above 25) marriage was found high in North District.

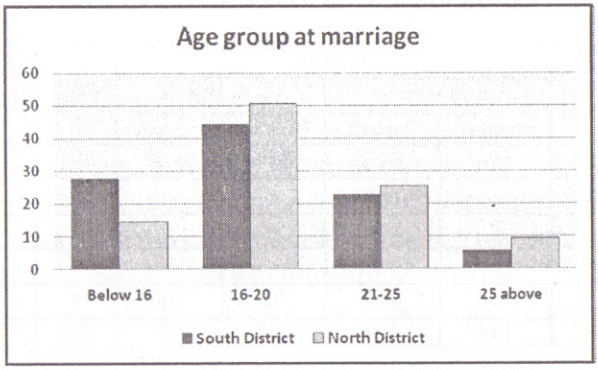


Figure: 5.19

Table-5.20: General problems faced by women*

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Itching	51	34.22	12	8.0	63	21.07
Weakness	74	49.66	78	52.0	152	50.83
Back pain	66	44.29	126	84.0	192	64.21
W. discharge	1	0.67	10	6.66	11	3.67
Abortion	1	0.67	-	-	01	0.33
Burning	11	7.38	02	1.33	13	4.34
Irregular M.C	14	9.39	12	8.0	26	8.69
Frequent PRE	24	16.1	-	-	24	8.02
No problem	-	-	04	2.66	04	1.33
NA	07	4.69	02	1.33	09	3.01
Total women	**149**		**150**		**299**	

Source: Field survey 2013 **Multiple response*

Table-5.20. explains general health problems of respondent women. More than 64 percent of respondents reported that they were facing 'back pain'. It was recorded high in North Tripura (84.0 %) as compared to South (44.29 percent). After that about 51 percent women were suffering by 'weakness' problem. It was also found high in North district. However, about 21.07 percent women were suffering by 'itching' problem and surprisingly it was reported very high (34.22%) in South district whereas; it was just 8 percent in North district. Rest of the women were facing problem by irregular M.C, Frequent PRE and it was happening only in South district. This is going to support respondents of both districts were mostly facing weakness, back pain, itching, irregular M.C etc.

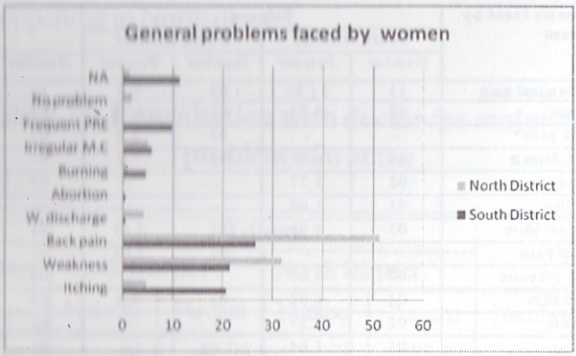


Figure: 5.20

Table-5.21: Major diseases faced by women

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Disease faced	61	40.93	38	25.33	99	33.11
No disease	88	59.07	112	74.67	200	66.89
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

The respondents were asked about their any major diseases in table-5.21. About 67 percent reported they didn't face any major disease. It was found high in North district compared to South. Whereas 33 percent women reported they were facing major diseases. It was high in South district than North.

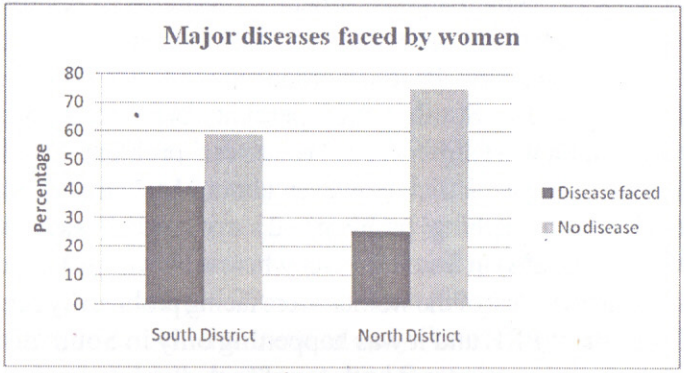


Figure: 5.21

Table-5.22: Name of diseases faced by Women

Sl No	Diseases faced by women	Tripura				Total	
		South District		North District			
		Number	Percent	Number	Percent	Number	Percent
1	Abdominal pain	13	21.32	03	7.9	16	16.17
2	Tumor	02	3.27	02	5.26	04	4.04
3	Back pain	-	-	03	7.9	03	3.03
4	Skin disease	04	6.57	03	7.9	07	7.07
5	Leg pain	02	3.27	-	-	02	2.02
6	Recline	01	1.64	-	-	01	1.01
7	Eye problem	03	4.92	01	2.63	04	4.04
8	Chest pain	-	-	01	2.63	01	1.01
9	Low pressure	02	3.27	-	-	02	2.02
10	Joint pain	04	6.57	03	7.9	07	7.07
11	Gastric	02	3.27	-	-	02	2.02
12	TB	01	1.64	-	-	01	1.01
13	Heart	03	4.92	02	5.26	05	5.05
14	Dystry	01	1.64			01	1.01
15	Jaundice	03	4.92	03	7.9	06	6.06
16	Malaria	05	8.2	01	2.63	06	6.06
17	Diabetes	02	3.27	-	-	02	2.02
18	Cough	03	4.92	-	-	03	3.03
19	Irregular period	02	3.27	-	-	02	2.02
20	Gallbladder	01	1.64	01	2.63	02	2.02
21	Headache	03	4.92	-	-	03	3.03
22	Dumb	01	1.64	-	-	01	1.01
23	Sprain	-	-	01	2.63	01	1.01
24	Bar	-	-	-	-	-	-
25	Allergy	01	1.64	-	-	01	1.01
26	Burning sensation	01	1.64	-	-	01	1.01
27	Fever	01	1.64	02	5.26	03	3.03
28	Liver problem	-	-	02	5.26	02	2.02
29	Cholera	-	-	01	2.63	01	1.01
30	Cancer	-	-	01	2.63	01	1.01
31	Appendix	-	-	01	2.63	01	1.01
32	Sugar	-	-	01	2.63	01	1.01
33	Nerve problem	-	-	01	2.63	01	1.01
34	Kidney stone	-	-	03	7.9	03	3.03
35	Mentally disorder	-	-	02	5.26	02	2.02
Total		61	100.0	38	100.0	99	100.0

Source: Field survey 2013

Table-5.22. shows the name of diseases faced by women. More than 16 percent women admitted they faced abdominal pain. It was recorded high in South district (21.32 %) than North (7.9 %). However, about 7 percent were reported that, they were suffering by joint pain. Joint pain had more or less equally happening in both the district. After that around 7 percent women were faced skin disease. It was reported almost same in both district. More than 6 percent respondents were facing Jaundice and malaria respectively. But remarkably jaundice was happening mostly in North district. On the other hand malaria happening mostly in South district. Beside this eye problem, heart problem, cough, irregular period is also found in South district. As well as gallbladder, fever, liver problem, kidney stone etc is also happening in North district.

Table-5.23: Consultation with doctor for major health problem of women

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	61	40.94	38	25.33	99	33.11
No disease	88	59.06	112	74.67	200	66.89
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Consultation regarding health problem is shown in table-5.23. About 34 percent women had used to consult with doctor about their health problems. Interestingly one noticeable major finding is that all the patients had consulted with doctor about their problem and rests of the respondent's women didn't have any major diseases.

PART-III

Reproductive Health Care and Practices

Table-5.24: Age at Menarche of women

Age group	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
10-15	110	73.83	105	70.00	215	71.91
16-20	09	6.04	23	15.33	32	10.70
Above 20	05	3.35	-	-	05	1.67
Don't know	25	16.78	22	14.67	47	15.72
Total	149	100.0	150	100.0	299	100
Mean age at menarche	13.79		14.04		14.0	

Source: Field survey 2013

Table-5.24. shows the age at menarche of respondent women. It is exposing most (71.91%) of the women's menarche had been started from 10-15 age group. While 10.7 percent were found under the age of 16-20 in the same. Followed by that 15.72 percent were found those are unresponsive about this information. Table also shows the mean age at menarche of women. 14 years is the age of menarche from North Tripura respondents while it was found 13.79 years age of South District respondents in the same.

District wise more or less same percentage of respondents in both district (South-74%, North-70%) were found whose menarche had been started from the age group of 10-15. On the other hand 15.33 percent were found in North district whose menarche had been started in the age group of 16-20 whereas it was found 6 percent in South District in the same.

Table-5.25: Menstruation cycle of women

Menstruation cycle (days)	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
10-15	-	-	-	-	-	-
16-20	09	6.05	21	14.0	44	14.72
21-25 & above	126	84.56	123	82.0	235	78.59
Don't know	14	9.39	06	4.0	20	6.69
Mean days of cycle	24.6		23.3		23.95	
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.25. reveals the menstruation cycle of women respondents. It is showing majority (78.59%) of respondents menstruation cycle was 21-25 days and above. It was found almost same in both districts. However, 14.72 percent respondent's reported that their menstruation cycle is 16-20 days. It was recorded high in North district. Majority (9.39%) of unresponsive people was found in South district compare to North (4.00%) regarding the above matter.

Table-5.26: Flowing status of menstruation cycle

Flowing status of Menstruation cycle	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	96	64.43	81	54.00	177	59.2
Less	09	6.04	08	5.33	17	5.69
More	35	23.49	58	38.67	93	31.1
Can't say	09	6.04	03	2.00	12	4.01
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Table-5.26. reveals the flowing status of menstruation cycle of respondents. It is indicate large number (59.2%) of respondent's menstruation cycle is normal followed by 31.1 percent respondents cycle was more and rest (5.69%) of the respondent's cycle was 'less'.

In South district Majority of respondents (64.43%) cycle is Normal than North (54.00%). While 31.1 percent women found in North

whose men's cycle had been recorded in 'more' categories, which was 23.49 percent in South district.

This proves that flowing status of menstruation cycle was much healthy in South district compare to North.

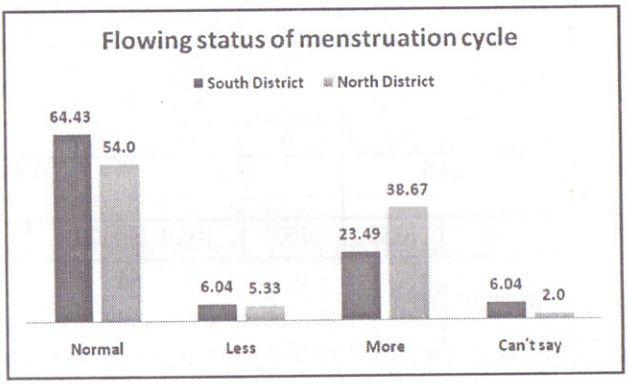


Figure: 5.26

Table-5.27: Duration of menstruation (in Days)

Duration (days)	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
1-3	34	22.82	33	22.0	67	22.41
4-6	89	59.74	88	58.67	177	59.19
7-9	26	17.44	28	18.67	54	18.06
Above 9	-	-	01	0.66	01	0.34
Total	149	100.0	150	100.0	299	100.0
Mean duration	4.44		4.84		4.64	

Source: Field survey 2013

Table-5.27. depicts the duration of menstruation of women. It is showing most (53.85%) of the respondents duration of menstruation was 4-6 days. Followed by 19.73 percent were found whose duration of menstruation is 1-3 days and few (17.39%) were found under 7-9 days duration in the same.

District wise more or less same majority of women were found under 4-6 days duration of menstruation in both district (South-53.69%, North-54.00%). While under 1-3 days duration 20.8 percent found in South which was 18.67 percent in North Tripura and 16.78 percent and 18.00 were found whose duration of menstruation was 7-9 days.

Table-5.28: Process of cleaning Perineum

Process of cleaning	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Cold water alone	06	4.02	76	50.67	82	27.42
Hot water alone	97	65.10	29	19.33	126	42.14
Cold water with soap	15	10.06	32	21.34	47	15.73
Hot water with soap	27	18.12	10	6.67	37	12.37
Medicated water	02	1.35	01	0.66	03	1.00
Not in use	02	1.35	02	1.33	04	1.34
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.28. indicates the perineum status cleaning of women. It is showing large number (42.14%) of women were using hot water for perineum cleaning. After that 27.42 percent were found those are using cold water and some of respondents were using cold water with soap (15.73%) and rest (12.37%) of the women were using hot water with soap.

In district level status maximum (65.1%) women were found in south Tripura who are using hot water while it was 42.14 percent in North district. But most (50.67%) of the respondents were found in North district those were using cold water for perineum cleaning while this is just 4.02 percent in South district.

So from this table it is clear in South district women are mostly using hot water, hot water with soap but interestingly in North district women were preferred cold water, cold water with soap for perineum cleaning.

Table-5.29: Types of pad using by women

Types of pad	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Using cloths alone	52	34.89	42	28.00	94	31.44
Cloth & Sanitary napkin	04	2.69	22	14.67	26	8.70
Sanitary napkin	04	2.69	18	12.00	22	7.35
None	89	59.73	68	45.33	157	52.51
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.29. finding out the types of pad using by women. Table showing most of the respondent (52.51%) women do not use anything. Followed by maximum (31.44%) women were using cloths and few (7.35%) were found those were using only sanitary napkin.

In south district 34.89 percent cloth user was found whereas 28.00 percent found in North. After that majority of cloth-sanitary napkin user (14.67%) and only sanitary napkin user (12.00%) were found in North district which was only 2.69 & 2.69 percent in South district in the same.

It is consider that majority of women were using cloths in the study area of South whereas good percent of respondents from North also start to using sanitary napkin. So it can be conclude on the basis of above status women from South were mostly traditional compare to North. By the way respondents were more conscious about their reproductive health hygiene in North Tripura.

Table-5.30: Frequency of using pad

Frequency/ day	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Once	09	6.05	51	34.00	60	20.06
Twice	34	22.82	29	19.33	63	21.07
Thrice/more	15	10.06	02	1.33	17	5.7
None	91	61.07	68	45.34	159	53.17
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.30. demonstrates the frequency of pad user. It is viewing most of the respondents (53.17%) do not using anything. While 21.07 percent were using pad twice per day. After that more or less same percent of women were using pad once per day (20.06%).

In district level scenario most of the respondents (45.34%) do not used anything in North district whereas it was found 61.07% in South.

It can be considered that most of the women of South district do not using anything while women from North comparatively better in terms of frequency of pad using.

Table-5.31: Disposal of used pad

Disposal process	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Thrown in open place	39	26.17	10	6.67	49	16.39
Thrown in dustbin/pit	17	11.40	61	40.67	78	26.08
Burn	02	1.35	08	5.33	10	3.35
None	91	61.08	71	47.33	162	54.18
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.31. shows the disposal of using pad. It is showing majority of women used to throw their pad in dustbin or pit. Few (16.39%) used to throw in an open place.

District wise most (26.17%) of the women in South district used to throw their pad in open place whereas majority of (40.67%) women from North district used to throw their pad in dustbin.

This goes to prove that women respondents in North were more aware than South respondents regarding the health hygiene condition.

PART-IV

Mother Health Care and Practices

Table-5.32: Age group at first pregnancy

Age group	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
12-15	22	14.77	16	10.67	38	12.71
16-20	66	44.29	54	36.00	120	40.14
21-25	33	22.14	51	34.00	84	28.09
26-30	16	10.73	18	12.00	34	11.37
31-35	03	2.02	03	2.00	06	2.00
36-40	02	1.36	06	4.00	08	2.68
No child	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100
Mean age at pregnancy	20.27		21.58		21.0	

Source: Field survey 2013

Table-5.32. describes the average age group of first pregnancy of respondents. It indicates overall 40.14 percent mother was given first birth of child in the age group of 16-20 years. After that 28.09 percent women were found those were given first birth in the age of 21-25 years. But 12.71 percent women were also found those are giving first birth in the lower age group of 12-15.

District level more or less same majority of women were given birth of first child in the age of 16-20 in both South (44.29%) and North (40.14%). Followed by 22.14 percent in South and 34.00 percent in North were found who were given birth of their first child in the age of 21-25.

From this data it is clear majority of women's first pregnancy age group is 16-20 & 21-25. But one important thing is that trend of lower age pregnancy is more in South district compare to North which is very bad for women and child health.

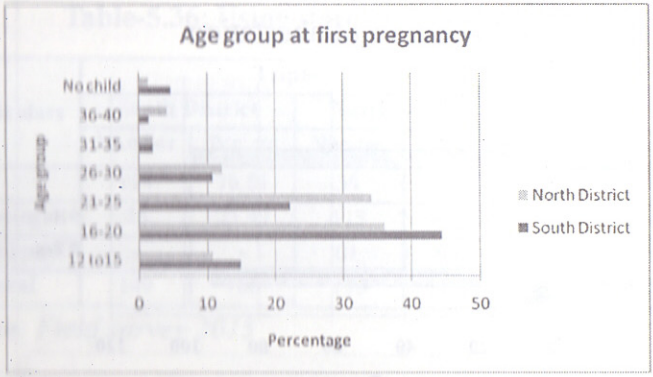


Figure: 5.32

Table-5.33: Status of child birth

Status of birth	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
L-Live birth	288	91.76	400	99.5	688	98.29
S-Still birth	03	1.03	-	-	03	0.43
C-Congenital abnormality	-	-	-	-	-	-
Multiple birth	-	-	-	-	-	-
No child/Not yet	07	7.21	02	0.5	09	1.28
Total	298	100	402	100	700	100

Source: Field survey 2013

Table-5.33, represents the status of child birth. Above table showing most (98.29%) of the children's birth status is live birth while very few (0.43%) were found still birth.

District wise live birth is more (99.5%) in North while it was recorded 91.76 percent in South district. But still birth is found only in South Tripura.

Table-5.34: Information of abortion

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	11	7.38	04	2.67	15	5.0
No	138	92.62	146	97.33	284	95.0
Total	149	100.0	150	100	299	100

Source: Field survey 2013

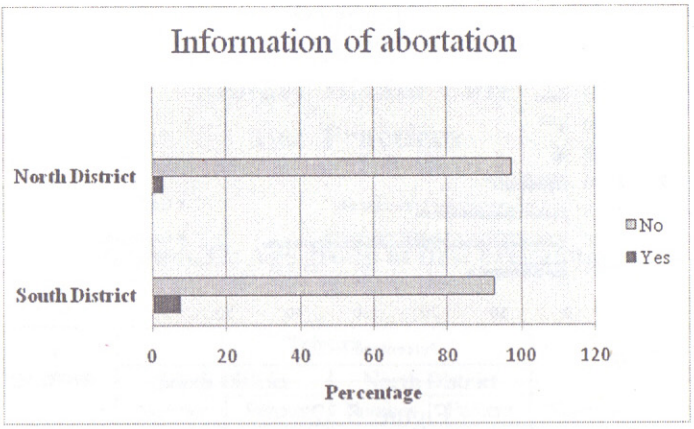


Figure: 5.34

Abortion of respondents shows in table-5.34. More than 90 percent confessed that they have not done abortion. It was found high in North district compared to South. However, only 5 percent respondent admitted that they had undergone an abortion. It was reported higher in South district.

Table-5.35: Problem of mother during delivery

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Problem faced	15	10.06	20	13.33	35	11.71
No problem	134	89.94	130	86.67	264	88.29
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.35. exhibits the problem of mother during delivery. Most of the respondents (88 percent) reported that they don't face any problem during delivery. Whereas about 12 percent said that they were facing problem during delivery. It was found high in North district compared to South. Interestingly it is considered that problem of mother during delivery was found high in North district compare to South.

Table-5.36: Using status of contraceptive

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	114	76.51	36	24.00	150	50.17
Not using	35	23.49	113	75.33	148	49.50
Don't know	-	-	01	0.67	01	0.33
Total	149	100	150	100	299	100

Source: Field survey 2013

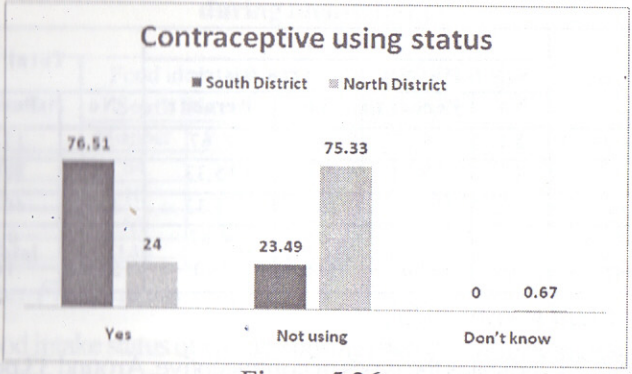


Figure: 5.36

Table-5.36. represents the using status of contraceptive. It is showing about 50.17 percent of people were using contraceptive while 45.49 percent people were not using any contraceptive. District wise more contraceptive user was found in South district (76.51%) compare to North (24.0%).

It was reported people of South district are more aware about the family planning than the people of North district.

Table-5.37: Comparison among contraceptive user

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Husband	48	32.21	14	9.33	62	20.74
Wife	66	44.3	22	14.67	88	29.43
Not used	35	23.49	113	75.33	148	49.5
Don't know	-	-	01	0.67	01	0.33
Total	149	100.0	150	100.0	299	100.0

Source: Field survey 2013

Above table shows the contraceptive user. It shows more than 29 percent contraceptive user is women and it was recorded very high in South district (44.3%) than North (14.67%), whereas only 20.74 percent male were found contraceptive user. It was also found significantly high in south district. However in this modern era 49.5 people still not using any contraceptive. From this data it is clear to recognize that majority of women were using contraceptive than men.

Table-5.38: Types of contraceptive

Particulars	Tripura				Total	
	South District		North District			
	No	Percent	No	Percent	No	Percent
Indigenous	39	26.17	13	8.67	52	17.39
Modern	75	50.34	23	15.33	98	32.78
Not used	35	23.49	113	75.33	148	49.49
Don't know	-	-	01	0.67	01	0.34
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.38. indicates the types of contraceptive. Around 33 percent people were used modern types of contraceptive (oral contraceptive, condom, whereas, 17.39 percent were till used indigenous types of contraceptive (ethno medicinal plants and pill). Rest of the people did not use anything. But comparatively modern types of contraceptive users were found high in South district (50.34%) than North (15.33%).

Table-5.39: Age at menopause of women

Age at menopause	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
35-40	-	-	01	0.67	01	0.33
41-45	16	10.73	06	4.00	22	7.37
46-50	13	8.73	11	7.33	24	8.02
51-55	02	1.35	-	-	02	0.67
Above 55	-	-	01	0.67	01	0.33
Total	31	20.81	19	12.67	50	16.72
Mean age	45.74		48.05		47.0	
Not yet	118	79.19	131	87.33	249	83.28
Overall	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked regarding their age at menopause (Table-5.39). Most of the respondents (83. 28 %) admitted that they have not yet. It was reported high in North compared to South district. However about 7.37 percent of 41-45 age group and 8.0 percent of 46-50 age group respondents admitted that their menopause age. It was also reported high in South district. Table is also showing the mean age of women's menopause. About 47 years age was recorded as a menopause age of Reang women in Tripura.

Table-5.40: Food intake status of women during menstruation

Particulars	Food intake status during menstruation				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	84	56.38	108	72.00	192	64.21
More	10	6.71	03	2.00	13	4.35
Less	55	36.91	39	26.00	94	31.44
Total	149	100	150	100	299	100

Source: Field survey 2013

Food intake status of women during menstruation is shown in table-5.40. About 64 percent respondents admitted that they were taking food 'normal' in quantity. It was reported high in North district as compared to South. 29 percent respondents reported that their food intake status was 'less'. It was recorded high in South district as compared to North. However, 4.35 percent stated that their food intake status was 'more'. It was also found more in South district. This is going to establish that food intake statuses of respondents are comparatively better in North district than South district.

Table-5.41: Food intake status of women during pregnancy

Particulars	Food intake status during pregnancy				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	70	46.98	57	38.00	127	42.48
More	26	17.44	16	10.67	42	14.04
Less	53	35.58	77	51.33	130	43.48
Total	149	100	150	100	299	100

Source: Field survey 2013

Food intake status of women during pregnancy is shown in table-5.41. About 42 percent respondents said that their food intake status was 'normal' during pregnancy. It was found high in South district as compared to North. About 43 percent respondent admitted that they have taken food in 'less' amount. It was found high in North district. Even 14 percent respondents also reported that their food intake status was 'more'. It was recorded high in South district as compared to North. It is going to consider most of the respondents were taken food 'normally' in South whereas, respondents of North district were mostly taken food 'less' in amount during their pregnancy.

Table-5.42: Physical working status during menstruation

Particulars	Physical working status during menstruation				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	89	59.73	133	88.67	222	74.24
More	21	14.09	03	2.00	24	8.02
Less	39	26.18	14	9.33	53	17.74
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked regarding their physical working status during menstruation (Table-5.42). About 74 percent respondents said that they were doing physical work normally during their menstruation. It was found very high in North district as compared to South. 18 percent reported that their physical working status was 'less'. It was reported high in South district. This is going to prove that women from North were mostly doing normal work whereas, women from South district were mostly doing less amount of work during their menstruation.

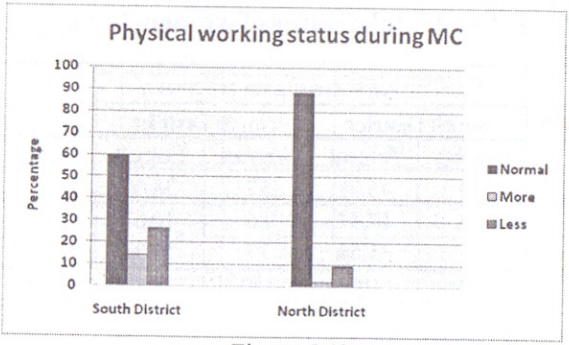


Figure: 5.42

Table-5.43: Physical working status during pregnancy

Particulars	Physical working status during pregnancy				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	73	48.99	62	41.33	135	45.15
More	26	17.45	12	8.00	38	12.71
Less	50	33.56	76	50.67	142	42.14
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were further asked regarding their physical working status during pregnancy (Table-5.43). About 45 percent respondents admitted that they were doing physical work 'normally' during their pregnancy. It was found high in South district as compared to North. 42 percent reported that their physical working status was 'less'. It was reported high in North district. This is going to conclude that women from North were mostly doing work 'less' in amount whereas, women from South district were mostly doing 'normal' work during their pregnancy.

Table-5.44: Status of Care taken for women during pregnancy (Anti natal care)*

Care during pregnancy (ANC)	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Registration	89	59.73	37	24.66	126	42.14
Medical check up	76	51.0	73	48.66	149	49.83
Routine blood test	68	45.63	33	22.0	101	33.77
Routine urine test	02	1.34	32	21.33	34	11.37
Weight taken	32	21.47	49	32.66	81	27.09
T.T. vaccine	-	-	41	27.33	41	13.71
Iron tablet	-	-	51	34.0	51	17.05
Do nothing	13	8.72	66	44.0	79	26.42
Do all	-	-	-	-	-	-
Total women	149		150		299	

Source: Field survey 2013 **Multiple responses*

The respondents also reported the status of anti natal care during pregnancy (Table-5.44). Many respondents were taken more than

one type of ANC care. Thus total number may vary in each district. About 50.0 percent respondents reported they were taken medical checkup. It was found high in South district as compared to North. 42.14 percent said that they were taken registration. It was reported very high in South district than North. However, around 34 percent respondents reported they were taken routine blood test during pregnancy. It was also reported high in South Tripura (45.63 %) as compared to North Tripura (22.0 %). Interestingly 13.71 percent and 17.05 percent respondents were found only in North district those were taken T.T. vaccine and iron tablet. It was found nil in South district. Overall 26.42 percent respondents were found those were not taken any care and it was reported very high in North district. From this data it is strongly considered that respondents from South district were taken better anti-natal care as compared to North district people.

Table-5.45: Problem of women during pregnancy

Problems	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Back pain	89	38.19	86	33.46	175	35.71
Weakness	76	32.62	96	37.35	172	35.10
Swelling	68	29.19	66	25.69	134	27.35
Bleeding	-	-	01	0.38	01	0.20
Deformed foetus	-	-	04	1.56	04	0.82
Other	-	-	04	1.56	04	0.82
Total	233	100	257	100	490	100

Source: Field survey 2013

The respondents were asked whether they face any problem during pregnancy (Table-5.45). Slightly greater than one third (36 percent) reported that they were faced back pain problem. It was found high in South district as compared to North. Almost same amount of people stated that they were faced weakness problem. But it was found high in North district. Very less amount of people were facing swelling, bleeding and deformed fetus.

Table-5.46: Delivery status of women

Delivery status	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Safe	241	82.25	394	93.59	635	88.93
Unsafe	52	17.75	27	6.41	79	11.07
Total	293	100	421	100	714	100

Source: Field survey 2013

The delivery status of women is shown in table-5.46. It divided into two categories i. e. safe and unsafe delivery. 89 percent respondents said that their delivery process was safe. It was found high in North district as compared to South. However, more than 11 percent said that their delivery status was unsafe. Unsafe delivery was found high in South district.

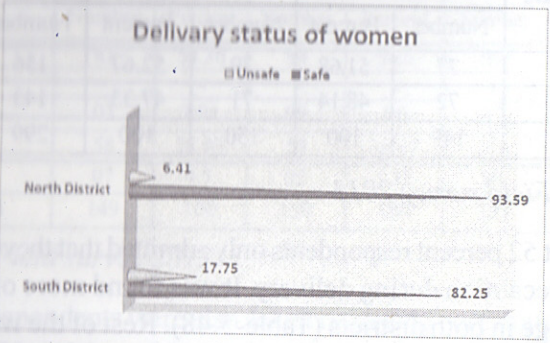


Figure: 5.46

Table-5.47: Process of safe and unsafe delivery status

Safe delivery	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Trained dai	132	54.77	249	63.19	381	60.0
ANM	-	-	11	2.8	11	1.74
Hospital	109	45.23	134	34.01	243	38.26
Total	241	100	394	100	635	100
Unsafe delivery						
Untrained dai	52	100	27	100.0	79	100
Total	52	100	27	100	79	100

Source: Field survey 2013

The respondents were further asked regarding the process of safe and unsafe delivery (table-5.47). Under safe delivery process 60 percent women said that their delivery was conducted by trained dai. It was found high in North as compared to South district and more than 38 percent said that their delivery was done in hospital. It was found high in South district. This is going to consider that women were mostly depending on trained dai in North district. Whereas in South women were mostly depend on trained dai as well as hospital also.

The respondents were also asked about their unsafe delivery process. All the unsafe delivery was conducted by untrained dai.

Table-5.48. Safety precautions during delivery

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	77	51.68	79	52.67	156	52.17
No	72	48.14	71	47.33	143	47.83
Total	149	100	150	100	299	100

Source: Field survey 2013

About 52 percent respondents only admitted that they were taken safety precaution during delivery. It was found more or less same percentage in both districts (Table-5.48). Rest of the women does not use anything.

Table-5.49: Types of precautions

Safety precautions	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Metal coin	06	3.81	09	5.59	15	4.71
Talcum powder	24	15.18	06	3.73	30	9.4
Medicinal tube	48	30.38	69	42.86	117	36.68
Dettol	08	5.06	06	3.73	14	4.38
Nothing	72	45.57	71	44.09	143	44.83
Total	158	100	161	100	319	100

Source: Field survey 2013

The respondents were again asked about types of their precautions during delivery (Table-5.49). They said that about 45 percent of them do not use anything during their delivery. It was found almost same in both districts. After that, more than 36 percent respondents reported they were used medicinal tube. It was found comparatively very high in North district. But talcum powder user was found more in South district. Thus, there has been no sharp variation among safety precaution user and non user. But some remarkable variation was found in precaution types between two districts.

Table-5.50: Practices related to cord cutting during delivery

a. Cord cut by

Cord cut by	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Dai	81	54.36	84	56.0	165	55.18
Mother	-	-	-	-	-	
In laws	03	2.01	09	6.0	12	4.01
Nurse	58	38.93	55	36.67	113	37.8
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were also asked regarding cord cutting method (Table-5.50.a). Most of the respondents admitted that their children's cord was cut by dai. More or less same percentages of people were using this process in both districts. Followed by around 38 percent were reported that they were conducted this process by nurse. But no sharp variation was found among two districts.

b. Cord cutting instrument

Tool used	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Blade	133	89.26	112	74.67	245	81.95
Bamboo	09	6.04	21	14.0	30	10.03
NA	07	4.7	17	11.33	24	8.02
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were also asked about cord cutting tool (Table-5.50.b). They reported about 82 percent were used blade for cord cutting. It was found high in South district. However, 10 percent of them admitted they have used bamboo for cord cutting. But remarkably it was found extremely high in North district.

c. Cord disposal place

Disposal place	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Under tree	23	15.43	43	28.67	66	22.07
Under roof	08	5.36	10	6.67	18	6.02
In pond	111	74.5	95	63.33	206	68.9
NA	07	4.71	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

The cord disposal place is shown in table-5.50.c. Most of the (69%) respondents said that after cord cutting they were thrown it into pond. This tradition was found high in South district as compared to North. Then, about 22 percent reported after cutting they put the cord under tree. This practice was found amazingly high in North Tripura. Rest of the women reported they put it under roof. It was also recorded little bit high in North district.

Table 5.51: Time taken by placenta to come out

Time	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Immediate	105	70.48	125	83.33	230	76.93
4 hours	15	10.06	10	6.67	25	8.36
2 days	07	4.7	04	2.67	11	3.68
4 days	15	10.06	09	6.0	24	8.02
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Above table shows time taken by placenta to come out (Table-5.51). About 77 percent respondents said that placenta has been come out immediately. This response was found high in North district as compared to South. About 8 percent respondents in both categories were reported placenta takes 4 hours and 4 days to come out respectively. This feedback in both categories was found high in South district as compared to North.

Table-5.52: Breast feeding time

Time	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Same day (choles)	30	20.13	31	20.67	61	20.40
After 3-4 days	108	72.48	115	76.67	223	74.59
No breast feeding	4	2.69	2	1.33	06	2.0
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.52. depicts the breast feeding time of respondents after delivery. More than 74 percent of respondent said that their breast feeding time was 3-4 days after giving birth. It was found high in North as compared to South district. However, 20.4 percent reported that they have given breast milk from the same day of their child birth. It was found more or less same in both districts. But few respondents were found those can't give breast milk of their baby and it was found high in South district. It goes to prove respondents of South were less aware about the importance of breast feeding.

Table-5.53: Reason of breast feeding

Reason	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Good	119	79.87	135	90.0	254	84.95
Harmful	14	9.39	09	6.0	23	7.7
No /low milked produced	09	6.04	04	2.67	13	4.34
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked for reason of breast feeding (Table-5.53). Almost 85 percent respondents admitted that breast milk is good for health. It was interestingly found very high in North district as compared to South. Amazingly about 7.7 percent supported that breast milk is harmful and it was found high in South compared to North. Some respondents also stated that no lactation after delivery. This percentage was found high in South district. From the above data it is going to consider respondents of North district was much aware than South regarding breast feeding matter.

Table-5.54: Period of rest after delivery

Resting period	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
No rest	02	1.34	02	1.33	04	1.34
3 day's	06	4.02	02	1.33	08	2.68
11 day's	07	4.7	06	4.00	13	4.34
22 day's	11	7.38	18	12.00	29	9.70
1 month	74	49.67	107	71.34	181	60.54
2 month	29	19.46	10	6.67	39	13.04
3 month	13	8.74	03	2.00	16	5.35
NA	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.54. represents the period of rest after delivery of respondents. Most of the respondents (About 61 %) reported that their resting period after delivery was 1 month. It was found high in North Tripura as compared to South. About 13 percent respondents admitted that their resting period was 2 month. It was found high in South district as compared to North. This is going to consider majority of women from North district were taking rest maximum fifteen days to one month whereas, resting trend of South district women was high in between one to three months duration.

Table-5.55: Practices of post natal care

a. Resting place of women

Coated with cow dung	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	05	3.35	18	12.00	23	7.7
No	137	91.95	130	86.67	267	89.29
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked regarding their resting place (Table-5.55.a). About 89 percent said that their resting place was not coated with cow dung. It was found high in South district as compared to north. However, only 7.7 percent reported that their resting place was coated with cow dung. It was found very high in North as compared to South. It goes to prove that this trend was mostly used by North district people as compared to South.

b. Use cotton for cleaning

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	34	22.82	56	37.33	90	30.10
No	108	72.48	92	61.34	200	66.89
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.55.b. reveals the using status of cotton for cleaning as a post natal care. Majority of (67%) respondents stated that they do not use cotton for cleaning as a post natal care. It was high in South district as compared to North. Only 30 percent reported that they were using cotton for cleaning. It was found more in North district. It considers that cotton user was more in North district.

c. Other means of cleaning vaginal parts*

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Soap	40	24.55	29	16.97	69	20.67
Brandy	5	3.07	12	7.01	17	5.08
Bath	111	68.09	128	74.86	239	71.56
NA	07	4.29	02	1.16	09	2.69
Total	163	100	171	100	334	100

Source: Field survey 2013 *Multiple response*

The respondents were asked about other means of cleaning vaginal parts (Table-5.55.c). Majority (More than 71%) of respondents said that 'bathing' was one of the processes of cleaning vaginal parts. It was found high in North as compared to South. About 21 percent reported that they were using 'soap' for cleaning for vaginal parts which was found high in South district. However, about 5 percent were admitted that they were using 'brandy' for cleaning vaginal parts. It was found more in North district as compared to South.

d. Day's for cleaning

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Two days	07	4.7	10	6.67	17	5.69
Seven days	20	13.42	15	10.00	35	11.71
Eleven days	26	17.44	16	10.67	42	14.04
Twenty days	79	53.02	101	67.33	180	60.2
Done nothing	10	6.72	06	4.00	16	5.35
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.55.d. exhibits the days for cleaning. About 60 percent respondents reported that they were cleaning up to twenty days of their reproductive organ. It was found high in North district as compared South. About 14 percent said that they were cleaning up

to eleven days. It was found high in South district as compared to North.

Table-5.56: Problems during post delivery

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Excess bleeding	17	11.11	10	6.63	27	8.89
Late placenta	04	2.62	12	7.94	16	5.26
Breach delivery	02	1.3	02	1.32	04	1.31
No problem	123	80.39	125	82.79	248	81.57
NA	07	4.58	02	1.32	09	2.97
Total	153	100	151	100	304	100

Source: Field survey 2013

Problem of respondents during post delivery is showing in table-5.56. About 82 percent respondents admitted that they do not face any problem during post delivery. It was recorded almost same in both districts. 9 percent reported that they were face 'excessive bleeding' problem and it was reported high in South compare to North. Few respondents were reported they were face problem by 'late come out of placenta'. It was found high in North (8 percent) as compared to South (3 percent).

Table-5.57: Kind of treatment

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Medical Doctor	46	30.88	47	31.33	93	31.10
Witchcraft	11	7.38	10	6.66	21	7.02
Did nothing	85	57.04	91	60.68	176	58.87
NA	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Kind of respondent's treatment shows in table-5.57. About 59 percent respondents said that they do not take any treatment. It was reported high in North district as compared to South. However, 31

percent reported they were taken treatment from 'medical doctor'. It was found almost same in both districts. Only 7.0% percent were taken 'witchcraft' treatment. This was reported almost same in South district and North district.

Table-5.58: Post natal food intake (40 days)

Food intake period	Post natal food intake				Total	
For 11 days	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	53	35.57	46	30.67	99	33.11
More	53	35.57	03	2.00	56	18.73
Less	36	24.16	99	66.00	135	45.15
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100
For 15 next days						
Normal	67	44.97	74	49.34	141	47.15
More	61	40.94	09	6.0	70	23.41
Less	14	9.39	65	43.33	79	26.43
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100
For next 15 days						
Normal	61	40.94	101	67.34	162	54.18
More	75	50.34	11	7.33	86	28.77
Less	06	4.02	36	24.0	42	14.04
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Post-natal food intake status illustrates in table-5.58. The respondents were asked regarding post-natal food intake in three different phases i.e. first 11 days, next 15 days and then 15 next days. For 11 days duration, about 45 percent respondents reported they were taken food in 'less' amount. It was found very high in North (66 percent) district as compared to South (24 percent). About 33 percent admitted that they were taken food 'normally' during post-natal period. It was recorded high in South district as compared to North district. However about 35.5 percent respondents were found in South those were taken 'more' food as compared to North (2 percent) district people during post-natal period.

For next 15 days duration about 47 percent respondents

reported that they were taken food 'normally'. It was found almost same in both districts. After that more than 26 percent were admitted that they were taken food in 'less' amount. It was found very high in North (43 percent) district as compared to South (9 percent). Interestingly 41 percent respondents were found in South district those were reported they have taken 'more' food during post-natal period whereas, it was just 6 percent in North.

For 15 next days about 54 percent respondents told that they were taken food 'normally'. It was reported high in North district than South district (41 percent). After that 29 percent respondents admitted that they were taken 'more' food during post-natal care. It was found 50 percent in South district whereas; it was found only 7.3 percent in North district. This is going to consider women of South district were mostly taken 'more food' as well as 'normal' in this duration whether; respondents of North were preferred normal and less food in the same.

Interestingly It is going to conclude that during post natal food intake period (40 days) respondents of South were mostly given preference to taken 'normal' and 'more' food whether North district respondents were mostly given priority to taken 'normal' and 'less' food during their post-natal care.

Table-5.59: Post-Natal physical work

Physical work	Post natal physical work				Total	
For 11 days	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	43	28.87	45	30.0	88	29.43
More	65	43.62	-	-	65	21.74
Less	30	20.13	53	35.33	83	27.76
No work	04	2.69	50	33.33	54	18.06
NA	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100
For 15 next days						
Normal	51	34.22	80	53.34	131	43.82
More	71	47.66	02	1.33	73	24.41
Less	20	13.42	66	44.0	86	28.76
NA	07	4.7	02	1.33	09	3.01
Total	149	100	150	100	299	100
For next 15 days						
Normal	55	36.91	110	73.33	165	55.18
More	77	51.68	21	14.0	98	32.78
Less	10	6.72	17	11.34	27	9.03
NA	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Post-natal physical work status depicts in table-5.59. The respondents were asked regarding post-natal work in three different phases i.e. first 11 days, next 15 days and then 15 next days. For 11 days duration, about 29.43 percent respondents said that they were doing work 'normally'. It was found almost same in both districts. Around 28 percent respondents admitted that they were doing work 'less' in amount during post-natal period. It was recorded high in North district as compared to South district. However 44 percent respondents were found in South district those were doing 'more' work in first 11 days of post-natal period which was found nil in North district. But interestingly 33 percent respondents of North district reported they were not doing any work during this period, which was found only 3 percent in South district. It is going to consider that respondents of South were mostly preferred 'more' and 'normal'

physical work whereas respondents of North were preferred 'no work' as well as 'less work' during post-natal physical work.

For next 15 days duration about 44 percent respondents reported that they were doing work 'normally'. It was reported high in North (54 %) districts as compared to South (34 %). About 29 percent were admitted that they were doing work in 'less' amount. It was found very high in North (44 %) district as compared to South (13.4 %). Interestingly 48 percent respondents were found in South district those were doing 'more' work during post-natal period whereas, it was just 1.33 percent in North. It is indicates respondents of South were mostly doing 'normal' and 'more' work whereas, North district respondents were mostly preferred 'normal' and 'less' work.

For 15 next days about 55 percent respondents said that they were doing work 'normally'. It was reported high in North district (73 %) than South district (37 %). After that 33 percent respondents admitted that they were doing 'more' work during post-natal period. It was found 51.5 percent in South district whereas; it was found only 14 percent in North district. This is going to consider women of South district were mostly doing '**more**' work whether; respondents of North were preferred '**normal**' work in the same period.

Table-5.60: Medical checkup after delivery

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	67	44.97	76	50.67	143	47.83
No	75	50.34	72	48.0	147	49.16
NA	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were also asked regarding medical checkup after delivery (Table-5.60). Slightly less than half of the respondents (48 %) stated they got 'medical checkup'. It was recorded high in North district as compared to South. However, almost same amount (49 %) of respondents also admitted that they do not take any medical

checkup after delivery. It was found little bit high in South district. This is going to prove that respondents of North district were most aware as compared to South district respondents regarding the above matter.

Table-5.61: Immunization status of women

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	99	66.44	135	90.00	234	78.26
No	43	28.87	13	8.67	56	18.73
NA	07	4.69	02	1.33	09	3.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Immunization status of respondents shows in table-5.61. About 78 percent of respondents admitted that they were taken immunization. It was found significantly high (90 %) in North district as compared to South district (66.5 %). However, around 19 percent were reported they do not take immunization. It was recorded remarkably high in South district (29 %) as compared to North (9 %). Above data clearly indicates people of North are more conscious than South regarding the immunization during pregnancy period.

Table-5.62: Infant mortality and maternal mortality

Mortality rate	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Infant mortality	19	12.76	16	10.67	34	11.37
Maternal mortality	04	2.68	02	1.33	06	2.0
No incident	126	84.56	132	88.0	259	86.63
Total	149	100	150	100	299	100

Source: Field survey 2013

Information regarding infant and maternal mortality rate is shown in table-5.62. More than 11 percent incident of infant mortality was found and it was reported high in South compared to North. Whereas only 2 percent incident of maternal mortality was recorded which was also found high in South district.

PART-V

Children Health Care and Practices

Table-5.63: Birth place of children

Birth place	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Hospital	117	39.94	186	44.18	303	42.43
Home	176	60.06	235	55.82	411	57.57
Total	293	100	421	100	714	100

Source: Field survey 2013

Table-5.63. shows the birth place of children. About 42.43 percent reported that their children were born in hospital. It was found slightly high in North district. However majority (57.57%) of children were born at home. It was more or less same in both districts.

Table-5.64: Birth procedure of children

Birth procedure	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Normal	263	89.77	395	93.83	658	92.15
Cizerian	30	10.23	26	6.17	56	7.85
Total	293	100	421	100.0	714	100

Source: Field survey 2013

The respondents were asked regarding their children birth procedure (table-5.64). Most of the people (92 percent) reported their children birth procedure was normal. It was found high in North district compared to South. Only 5 percent children were born by cizerian procedure. It was high in South district.

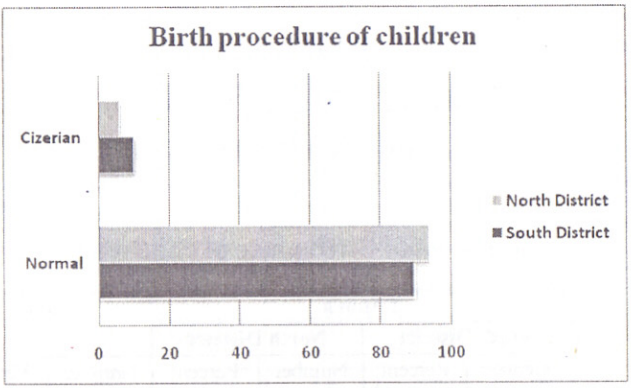


Figure: 5.64

Table-5.65: Problem of children during birth

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Problem faced	12	4.09	22	5.22	34	4.77
No problem	281	95.91	399	94.78	680	95.23
Total	293	100	421	100	714	100

Source: Field survey 2013

Problem of children during birth is shown in table-5.65. Most of the respondents (95 percent) reported that their children do not face any problem during birth. About 5 percent case recorded those children were facing problem during birth. It was found high in North district compared to South.

Table-5.66: Major diseases of children *

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Disease faced	14	4.78	22	5.22	36	5.04
No disease	279	95.22	399	94.78	678	94.96
Total	293	100	421	100	714	100

Source: Field survey 2013 ** Multiple response*

Only 5.04 percent respondents admitted that their children were faced different disease. It was found high in North. However, it was reported

high almost same in both districts. Almost 95 percent are diseases free (Table-5.66).

Table-5.67: Name of diseases faced by children

Sl No	Diseases faced by children	Tripura				Total	
		South District		North District			
		Number	Percent	Number	Percent	Number	Percent
1	Abdominal pain	03	21.43	02	9.0	05	13.89
2	Burn			01	4.55	01	2.78
3	Skin disease	02	14.28	04	18.19	06	16.67
4	Bones problem			01	4.55	01	2.78
5	Fever	03	21.43			03	8.33
6	Sprain			01	4.55	01	2.78
7	Eye problem	02	14.28	03	13.71	05	13.88
8	Diabetes			01	4.55	01	2.78
9	Cough			02	9.0	02	2.55
10	Pox	01	7.15			01	2.78
11	Gall bladder	02	14.28			02	5.55
12	Kidney stone	01	7.15			01	2.78
13	Jaundice			01	4.55	01	2.78
14	Malaria			03	13.71	03	8.33
15	Headache			01	4.55	01	2.78
16	Mental disorder			02	9.0	02	5.55
	Total	14	100	22	100	36	100

Source: Field survey 2013

Table-5.67. shows the name of diseases faced by children. More than 16.5 percent children were facing skin diseases. It was found more in North district as compared to South. Almost 14 percent were facing abdominal pain. It was recorded very high in South district than North. Around 14 percent children were suffered by eye problem. This problem was found almost equally in both the study area. After that more than 8 percent children were facing by fever in South district and malaria is found only in North district respectively. Beside this gallbladder stone were found only in South district and Malaria problem was reported only in North district only.

Table-5.68: Consultation with doctor about children diseases

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	14	9.39	22	14.67	36	12.04
No disease	135	90.61	128	85.33	263	87.96
Total	149	100	150	100	299	100

Source: Field survey 2013

Consultation regarding child health problem is shown in table-5.68. All the respondents (12.04%) reported that they were consulted with doctor about their child health problem. But most of the respondents (88 percent) said that their children don't have any diseases. It was recorded high in South than North district.

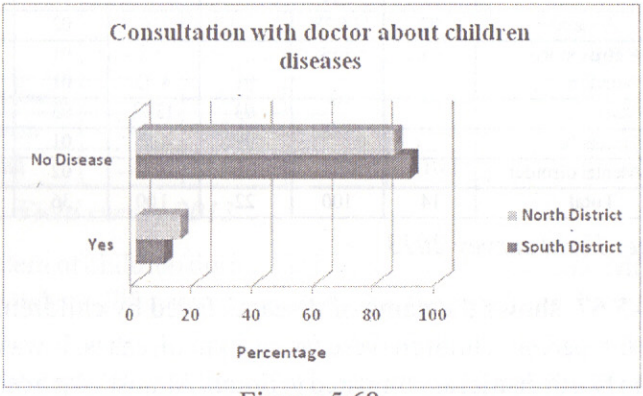


Figure: 5.68

Table-5.69: Number of children vaccinated (Polio)

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Taken polio	222	75.83	366	86.94	588	82.35
Not taken	71	22.82	55	13.06	126	17.65
Total	293	100	421	100	714	100

Source: Field survey 2013

The respondents were asked regarding polio or vaccination of their children. About 82 percent said that they possess polio for their children. It was reported high in North district (87 percent as compared

to South as 76 percent). More than 17 percent reported they don't possess polio for their children and it was found high in South district than North. This goes to prove that people of North are more child health conscious. (Table-5.69)

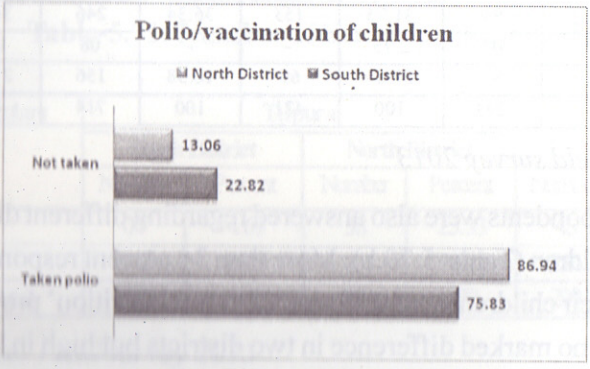


Figure: 5.69

Table-5.70: Health problem of children

a. De-worming status

De-worming	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	202	68.95	325	77.19	527	73.81
No	91	31.05	96	22.81	187	26.19
Total	293	100	421	100	714	100

Source: Field survey 2013

De-worming status of children is showing in table-5.70.a. Majority (74 percent) of respondents reported that their children were suffered by de-worming problem. It was recorded high in North district. About 26 percent respondents admitted their children don't have any de-worming problem. It was found high in south districts compared to North. This is going to consider de-worming problem was happening highly in North district than South.

b. Other diseases of children

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Diarrhea	61	20.82	137	32.55	198	27.73
Premature baby	44	15.01	62	14.73	106	14.85
Malnutrition	93	31.75	153	36.34	246	34.45
Pertussis	08	2.73	-	-	08	1.12
No problem	87	29.69	69	16.38	156	21.85
Total	293	100	421	100	714	100

Source: Field survey 2013

The respondents were also answered regarding different disease of their children (Table-5.70.b). More than 34 percent respondents said that their children were suffering from 'malnutrition' problem. There was no marked difference in two districts but high in North district. After Malnutrition, 28 percent admitted that their children were suffering from 'diarrhea'. It was also happening highly in North (32.5 percent) as compared to South (21 percent). 15 percent respondents were also stated that, their children were facing problem by pre-maturity. This problem also found more or less same in two districts. It is going to conclude that children from North district were mostly facing problem by 'malnutrition' and 'diarrhea' as well as children from South district also suffered by same diseases but comparatively less than North.

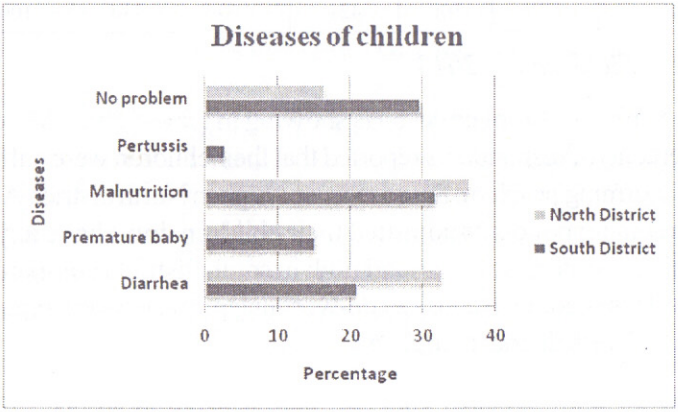


Figure: 5.70.b

PART-VI
Health Care Facilities

Table-5.71: Number of health insurance holder

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	07	4.69	38	25.33	45	15.05
No	142	95.31	112	74.67	254	84.95
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.71, shows status of health insurance holder. Most of the respondents (85 %) admitted that they have no health insurance. It was found high in South as compared to North district. However health insurance holder is more (25 %) in North district.

Table-5.72: Smart card holder family

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Having smart card	116	77.86	115	76.67	231	77.26
Not having	33	22.15	35	23.33	68	22.74
Total	149	100	150	100	299	100

Source: Field survey 2013

Smart card holding status shows in table-5.72. Smart card beneficiary will get free medicine from any government hospital. Most of the respondent's (78 %) having smart card and this rate were slightly high in South district. However, about 22 percent respondents have no smart card.

Table-5.73: Govt. Medical camp conducted in local area

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	108	72.49	104	69.33	212	70.90
No	34	22.81	43	28.67	77	25.75
Don't know	07	4.70	03	2.00	10	3.35
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked about govt. medical camp (Table-5.73). About 71 percent people said that govt. medical camp has been conducted in the local place. It was found high in South district as compared to North. Whereas almost 26 percent reported that no medical camp conducted by govt. in their area. It was found high in South district.

Table-5.74: Availability of Primary Health Centre (PHC) in local place

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	123	82.56	130	86.67	253	84.61
No	24	16.10	14	9.33	38	12.71
Don't know	02	1.34	06	4.00	08	2.68
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked regarding primary health centre (table-5.74). More than 84 percent people admitted that PHC is available in their local place. It was found little bit high in North district as compared to South. Whereas only 13 percent reported that PHC is not available in their local area. It was found high in South district. It is considered that PHC facility was comparatively better in North Tripura.

Table-5.75: Distance of PHC from respondents' residence

Distance	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Within 5 km	71	47.65	123	82.00	194	64.89
Above 5 km	75	50.34	18	12.00	93	31.10
No idea	03	2.01	09	6.00	12	4.01
Total	149	100	150	100	299	100

Source: Field survey 2013

Table-5.75. demonstrates distance of PHC from respondent's residence. About 65 percent respondents stated that PHC located within 5 km from their residence. It was found very high in North district as compared to South. On the other hand 31 percent reported PHC located above 5 km distance from their residence. It was found very high in South district than North. It is goes to consider PHC facility was more effective in North district.

Table-5.76: Availability of ASHA worker in local area

Particulars	Tripura				Total	
	South District		North District			
	Number	Percent	Number	Percent	Number	Percent
Yes	115	77.18	105	70.00	220	73.58
No	25	16.78	24	16.00	49	16.39
Don't know	09	6.04	21	14.00	30	10.03
Total	149	100	150	100	299	100

Source: Field survey 2013

The respondents were asked regarding availability of ASHA workers (Table-5.76). More than 73 percent respondents reported that ASHA workers were available in their area. It was found high in South district as compared to North. 16 percent respondents stated ASHA workers were not available in their area and it was found almost equal in two districts. Rest of the respondents found unknown regarding the ASHA workers.

6

Summary, Recommendation and Conclusion

From the study some important major findings have been identified. Those are as follows.

General Information of Respondent's family

1. About 63 percent people were belonging to small family (1-4 members).
2. Overall Sex ratio was recorded 982 which were found to be higher than State and National figure.
3. About 20 percent respondent's family were found up to primary level educated. About 22 percent of respondent's families were completed high school level. However 8 percent & 4 percent were found in the category of higher secondary and graduate level passed respectively.
4. More than 50 percent respondent's occupation was wage labour. While almost 26 percent family were farmers. More than 17 percent family was involved in service sector.
5. About 50 percent household APL card holder. Whereas, 33 percent BPL was found in the study area.
6. About 60 percent respondent's monthly income was of 1000-5000. Followed by about 22.41 percent family's monthly income range was 5001-10000. But 7.35 families income of Rs. 10000-15000.
7. Respondents expensed about Rs. 35 out of Rs. 100 for their food purpose annually. About 16 rupees they expensed on education purpose. About 10 percent rupees were expensed for house making/repairing.

8. Almost 91 percent of respondents living in their own land. Around 70 percent families were having their own agricultural land. While 6 percent people were living in other land and a significant amount (30.43 percent) of people were agri. landless.

9. About 49 percent of the people were living in 'kachha or mud' house. 25 percent were living in 'mixed' house. 9 percent respondent's house was constructed by 'tin'.

10. Majority (57 percent) of people were using 'pit' type of latrine. While 30 percent respondents still dependent on 'open defecation system'. Rest (13 percent) of the respondents were using 'pacca' latrine.

11. 46.49 percent people were depending on hand pump for drinking water source. Followed by 35 percent respondents were using tape water.

12. Majority (77.93%) of people were using mud *chullah* as a cooking device. Whereas 17.06 percent were using gas stove and rest of them (5.01%) were having electric stove also.

13. Almost 72.0 percent respondents' houses were supplied with electricity while 28.09 percent people were living without electricity.

14. 7.69 percent people were using solar light while majority (92.31%) of respondents didn't have any solar light system.

15. Most (74.92%) of the respondents were cooking in separate kitchen whereas till now 25.08 percent people didn't have any separate kitchen.

16. 73.58 percent people were having separate house for domestic animal and 26.42 percent people didn't have any separate house for animal.

17. 53.85 percent people were using TV, whereas till 46.15 percent didn't have any TV which is a very significant rate in this modern era.

18. As well as 54.18 percent respondent were using mobile phone while 45.82 percent people didn't have any mobile phone.

19. Most of the (83.27%) people didn't have any vehicle. Rest (16.73%) of the people were having vehicle.
20. 60.21 percent people were having bank account while 39.79 percent people didn't have any bank account.
21. Majority (58.15%) of people were facing fever followed by that 53.0 percent faced by cough problem. Here after few (8.5%) were facing malaria and rest of them (7%) suffered from diarrhoea problem.
22. Majority (62.5%) of respondents had no diseases. Rest of them suffered from joint pain (6 %), abdominal pain (4 %) and few were (3 %) blood pressure patients.
23. 1.06 percent person were found disable and rest (98.94%) of the people's didn't have any disability.
24. 67% of the people were collecting medicine from government hospital/NRHM project followed by 33.11 percent people were collecting medicines from other than Govt. hospitals.
25. Most (52.28 %) of the villager's view was, there were no specific type of treatment. 39.65% people were found of taking modern method treatment, followed by 7.0 percent took herbal treatment. Rest of the people were till beliving in spiritual healers and witch craft type of treatment.

General profile of Respondents' women and their health status

26. About 35.45 percent of respondent's women age group was 26-35 years. About 30 percent belonged to the age group of 36-45 years. Interestingly no respondents were found below eighteen years of age. 12.37 percent were found under the age group of 19-25 years.
27. About 26.0 percent respondents' women were illiterate. Where as 21 percent of respondents completed primary level. However higher secondary and graduate level passed were found only 2.68 and 0.66 percent accordingly.

28. Around 98 percent respondents were married. Rest of them were divorced or separated.

29. Majority (47.49%) of women got married in the age group of 16-20. Followed by about 21 percent were married below the age of 16 years which was treated as early marriage. Rests of the (24.08%) respondents got married in the age group of 21-25 years.

30. More than 64 percent of respondents facing 'back pain' problem. About 51 percent women were suffering from 'weakness' problem. However, about 21.07 percent women were suffering from 'itching' problem.

31. About 67 percent women didn't face any major diseases. Whereas 33 percent women were facing major diseases.

32. Around 16 percent women faced abdominal pain. However, 7 percent were suffering from joint pain and skin diseases respectively. Whereas 6 percent respondents were facing Jaundice and malaria respectively.

33. Interestingly one noticeable major finding is that all the patients (34%) have consulted with doctor about their health problems and rest of the respondents' women didn't have any major diseases.

Women health care and practices

34. 72 percent of the women's menarche starts from 10-15 age groups. While 10.7 percent were found under the age of 16-20 in the same. The mean age at menarche of women is 14 years.

35. Majority (78.59%) of respondent's menstruation cycle repeats within 21-25 days & above. However, 15.0 percent respondents' reported that their menstruation cycle repeats within 16-20 days.

36. Large number (59.2%) of respondents' menstruation cycle was 'normal'. Followed by 31.1 percent respondents' cycle was 'more' and rest (5.69%) of the respondents' cycle reported 'less'.

37. 59.19 percent of the women's menstruating duration was 4-6 days. Followed by 22.41 percent reported, their duration was 1-3 days and few (18.06%) were found under 7-9 days duration in the same.

38. 42.14 percent of women were using hot water for perineum cleaning. After that 27.42 percent were found those were using cold water and some of the respondents were using cold water with soap (16.0%) and rest (12.37%) of the women were using hot water with soap.

39. Most of the respondent (52.51%) women didn't use anything during menstruation. Followed by majority of (31.44%) women were using cloths and only 7.35% were found those were using only sanitary napkin.

40. 21.07 percent women were using pad twice per day. 20.06 percent women were using pad once per day.

41. Majority of women (26.08%) used to throw their pad in dustbin or pit. Few (16.39%) used to throw in an open place.

Mother health care and practices

42. 40.14 percent mother had given first birth of child in the age group of 16-20. After that 28.09 percent were found to give first birth in the age group of 21-25. But 12.71 percent mother were reported that they had given first birth of child in the lower age group of 12-15. Average age of pregnancy were reported 21 years.

43. Most (98.29%) of the childrens' birth status was live birth while very few case (0.43%) were found still birth.

44. More than 90 percent mother didn't conduct any abortion. However, only 5 percent respondent attempted for abortion.

45. 88 percent respondents didn't face any problem during there child birth. Whereas about 12 percent said that they faced problem during that phase.

46. About 50.17 percent of people were using contraceptive while 45.5 percent people were not using any contraceptive.

47. 29.43 percent contraceptive user were women and it was recorded very high in South district (44.3%) than North (14.67%). Whereas around 21.0 percent male were found contraceptive user.

48. Around 33 percent people used modern types of contraceptive (oral contraceptive, condom). Whereas, 17.39 percent were till using indigenous types of contraceptive (ethno medicinal plants and pill).

49. 83.28 percent women yet not entered into the menopause age. However about 7.37 percent of 41-45 age group and 8.0 percent of 46-50 age group respondents already entered into menopause stage. The mean age at menopause was recorded 47 years.

50. About 64 percent respondents were taking food normal in quantity during their menstruation period. 31.44 percent respondents reported that their food intake status was 'less'. However, 4.35 percent stated that their food intaking status was 'more'.

51. About 42.5 percent respondents' food intaking status was 'normal' during pregnancy. More than 43 percent respondents took food in 'less' amount. Even 14 percent respondents also reported that their food intaking status was 'more'.

52. About 74 percent respondents were doing physical work normally during their menstruation. 18 percent reported that their physical working status was 'less'.

53. Around 45 percent respondents were doing physical work 'normally' during their pregnancy. 42 percent reported that their physical working status was 'less'.

54. About 50 percent respondents has taken medical check-up as an anti natal care. 42.14 percent said that they took registration. However, 34 percent respondents taken routine blood tests during pregnancy.

55. 36 percent women faced back pain problem during pregnancy. Almost same amount of people stated that they were facing weakness problem.

56. 89 percent respondents' delivery process was safe. However, more than 11 percent delivery case was recorded unsafe. Unsafe delivery was found high in South district.

57. Under safe delivery status, 60 percent delivery was conducted by trained dai and more than 38 percent reported that their delivery was conducted in hospital. All the unsafe delivery were conducted by untrained dai.

58. About 52 percent respondents took safety precaution during delivery.

59. About 45 percent women didn't use anything during their delivery. More than 36 percent respondents reported that they used medicinal tube and 9.4 percent women used talcum powder as a precaution during their delivery.

60. 55.18 percent children's cord was cut by *dai*. Followed by around 38 percent were reported that they conducted this process by nurse.

61. About 82 percent used blade for cord cutting. It was found high in South district. However, 10 percent of women used bamboo for cord cutting.

62. Most of the (69%) respondents used to throw the cord into pond after cutting. Then, about 22 percent reported that after cutting they put the cord under tree. This practice was found amazingly high in North Tripura.

63. More than 74 percent mothers' breast feeding started from 3-4 days after giving birth. However, 20.4 percent mother had given breast milk from the same day of their child birth.

64. Around 85 percent respondents opined breast milk is good for health. Amazingly about 7.7 percent supported that breast milk is harmful and it was found high in South compared to North.

65. Most of the respondents (61%) resting period were 1 month after delivery. About 13 percent respondents resting period were 2 month.

66. After delivery (postnatal care) 89 percent mothers resting place were not coated with cow dung. However, only 7.7 percent mothers resting place were coated with cow dung.

67. Majority of (67%) women do not use cotton for cleaning as a post natal care. Only 30 percent were using cotton for cleaning.

68. More than 71 percent womens' opinion were that 'bathing' is one of the processes of cleaning vaginal parts. About 21 percent were using 'soap' for cleaning for vaginal parts. However, about 5 percent were using 'brandy' for cleaning their vaginal parts.

69. 60 percent women have cleaned their reproductive organ up to twenty days. About 14 percent cleaned up to eleven days.

70. About 82 percent mothers do not face any problem during post delivery. 9 percent faced 'excessive bleeding' problem.

71. About 59 percent women didn't take any treatment. However, 31 percent took treatment from 'medical doctor'. Only 7.0 percent believed in 'witchcraft' treatment.

72. For 11 days duration, about 45 percent women took food (post natal food intake status) in 'less' amount. 33 percent took food 'normally' during post-natal period. It was recorded high in South district as compared to North district.

73. For next 15 days duration about 47 percent women were fed 'normally'. More than 26 percent were fed in 'less' amount. 41 percent women in South district took 'more' food during post-natal period.

74. For 15 next days about 54 percent respondents were fed 'normally'. Followed by 29 percent respondents were given 'more' food during post-natal care.

75. For 11 days duration, about 29.43 percent respondents said, they worked 'normally' (post natal physical work). Around 28 percent worked 'less' in amount during post-natal period. However 44 percent women in South district did 'more' work in first 11 days of post-natal period.

76. For next 15 days duration about 44 percent women were doing worked 'normally'. About 29 percent reported they worked 'less' in amount.

77. For next 15 days about 55 percent respondents were doing work 'normally'. After that 33 percent respondents were doing 'more' work during post-natal period.

78. 48 percent mother got 'medical check-up' after delivery. However, almost same amount (49%) of respondents did not take any medical check-up.

79. About 78 percent of respondents mother took immunization. However, around 19 percent did not take any immunization.

80. About 12 percent infant mortality was recorded. Whereas only 2 percent maternal mortality was recorded by the respondent women.

Children Health Care and Practices

81. About 42.43 percent children took birth in hospital. However majority (57.57percent) of children were born at home.

82. Most of the (92%) childrens birth procedure was normal. Only 5 percent children were born by cizerian procedure.

83. Majority of (95 percent) children did not face any problem during birth. About 5 percent children faced problem during birth.

84. Only 5.04 percent children faced different diseases. However, it was reported high and almost same in both districts. 95 percent were disease free.

85. 16.5 percent children faced skin diseases. Almost 14 percent were facing abdominal pain. Around 14 percent children suffered by eye problem.

86. 12.04% parents consulted with doctor about their child health problem. But most of the childrens (88 percent) didn't have any diseases.

87. Almost 82 percent children possess polio. More than 17 percent children don't possess polio.

88. 74 percent children suffered by de-worming problem. About 26 percent children didn't have any de-worming problem.

89. More than 34 percent children were suffering by 'malnutrition' problem. 28 percent children suffering from 'diarrhea'.

90. Different parts of plants e.g. *Kespa, Balsakao, Neem, Saimanda, Bamlai, Chan root, Mthaimkloy, Patharkuchi, Chamathuikla, Samnama, Bamlai, Buraha ganja, Buglipata, Samtakhhi, Bel leaves, Amai tree, Jatmari seeds* (local name) etc. were used by the people for baat, fracture, itching, cough, fever, abdominal problem, burn, joint pain, headache, pregnancy pain etc. (Annexure-I)

Health care facilities

91. 85 percent families have no health insurance. Only 15 percent health insurance holder has been found.

92. Most of the respondents (78 percent) having smart card however, about 22 percent respondents don't have any smart card.

93. According to 71 percent peoples' opinion, govt. medical camp has been conducted in the local place. Whereas almost 26 percents view is no medical camp was conducted by govt. in local area.

94. More than 84 percent people reported that primary health centre (PHC) is available in local place. Whereas only 13 percent said PHC is not available in their local area.

95. About 65 percent respondent stated, PHC located within 5 km from their residence. On the other hand 31 percent reported PHC located above 5 km distance from their residence.

96. More than 73 percent respondent reported ASHA workers were available in their area. 16 percent respondent stated ASHA workers were not available in their area.

RECOMMENDATIONS

After completion of the study numbers of major finding has been identified. Based on the above important findings some recommendation has been given for improvement of tribal reproductive health and child health care practices. Those are as follows.

1. Educational qualification is not satisfactory in higher studies. Majority of people are only literate; primary, and elementary level qualified. Some of them are H.S level and graduate level passed. Therefore it is very important to enhance their willingness to join in higher studies.

2. Almost 50 percent villagers belonged to Below Poverty Line. For increasing the economic condition of people different livelihood options should be provided. Majority of them involved in agricultural activities as well as wage labour activities. So, it is vital to focus on micro enterprise development and service sector work. If educational level is not increased then it will not be possible.

3. Women education level should be increased. Women are not well educated in the study area. Drop out girls students should be identified and convinced to join in school again.

4. Propagation of information about Govt. providing girls' education related schemes among the villagers.

5. Dissemination of awareness among the villagers for making nuclear family and also making them to maintain the minimum level of gap between two child.

6. Aware the people to use modern contraceptive method for both men and women to prevent unwanted pregnancy. It should be provided through local PHC or ASHA worker.

7. IEC technique should be used for all kind of awareness i.e. different women and child related Govt. scheme facilities, methods of disease prevention, different quotation against traditional belief. IEC may apply through poster, banner, news paper and TV channel also.

8. ASHA workers are playing an important role in the villages. But more service should be required particularly in hilly backward region. ASHA's responsibilities should link to patients with hospital. Delivery of pregnant women should be confirmed in Govt. hospital rather than home delivery through *dai* and aware them about incentive amount given by Govt.

9. Some villagers are still using traditional medicine which is produced by some witchcraft from local plants. People are mostly using ethno medicine for cough, headache, itching, fever, jaundice, eye problem, abdominal problem, joint pain, allergy etc. But these practices are not fruitful for all time. Therefore, it is in need to aware the villagers to go to hospital for proper scientific treatment.

10. Regular pre-natal check-up is necessary after pregnancy. Because numbers of women were not taking check-ups during pregnancy in the study area.

11. After delivery, post natal check-up of mother and child is also important for staying disease free. Check-up must be taken from reputed medical doctor or govt. hospital.

12. Some mothers thought breast milk is not good for child. So awareness generation is important for reducing this misconception. Because minimum 6 months lactation is necessary after birth for good health of child and immunization.

13. Polio, vaccination must be taken after birth of children. Some parents were not well known about the importance of child vaccination.

14. Doctor, nurse, required medical equipments, medicine, bed is not available in most of the PHCs. These facilities should be increased in all the PHCs.

15. For prevention of malaria, it is important to create effective domestic awareness mainly to maintain domestic hygiene consciously and must use mosquito net during sleeping.

CONCLUSION

The entire health issue requires a multi-pronged approach, clear policy directions where there is a collaboration of various sectors so that a holistic view point is possible for resolving these complex health challenges. Effective public health measures need to address issues of food hygiene, availability of clean air and water and proper sanitation. Designing of public policy should factor in local specifications, with decentralization and devolution of power, the local bodies will have a greater role. Addressing state, district or block specific public policy does not mean doing away with the role of the Central Government. It requires the Centre to be more proactive in addressing inequalities across states and to ensure appropriate regulatory and monitory mechanisms. The presence of NGOs and CBOs is lower in poorer regions. There is need to increase the number of care providers and create suitable working conditions to ensure their availability in remote areas.

Bibliography

Agte, V.V., S. A. Chiplonkar and K. V. Tarwadi. (2005). Factors influencing zinc status of apparently healthy infants. *Journal of American College of Nutrition,* 24, 334-341.

Ali, A. (1992). Nutrition: State of India's Health. In A. Mukopadhyay (Ed.), Voluntary Health Association of India (VHAI), Delhi.

Ali, S.S. (1998, July 18 - 31). The Reang refugees, India's National Magazine, The Hindu, 15(15), Kanchanpur, Tripura, Retrieved 12 Sept. 2013 from file:///I:/Tribal% 20health% 20Net%20 collection/Introduction%20materials/15150650.htm

Amir, L. (2008). Breast feeding and Socio-economic Status, *The Medical Journal of Australia*, Medical News Today, Retrieved on 24 Jan, 2013 from http://www.medicalnewstoday.com/releases/119753.php.

Anpin , R.D., & Prakash, J.W. (2006). Plants Used as Anti-Venom by Kani Tribes of Kilamalai Reserve Forest, Kanya kumari District. *Journal of Basic and Applied Biology*,

Aumeerudy., Y., (1996). Ethnobotany, linkages with conservation and development. In Proceeding of first training workshop, on *Ethnobotany and its applications to conservation* NARC, (pp. 152-157).

B. D. Maitreyi, K. Soumya & N. Denis (2010). A closer look at child mortality among Adivasis in India. Policy Research Working Paper 523, Retrieved 27 Jan. 2013 from http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-5231

Baby Steps Psychology Mazagine (2015), Retrieved on Aug. 2015 from http://babystepspsychmag.blogspot.in/2015_06_01_archive.html

Baby Steps Psychology Mazagine (2015), Retrieved on Aug. 2015from babystepspsychmag.blogspot.in/2015/06/good-or-bad-health-3-key-factors-that.html

Baker, D. W. et al (2007), Health Literacy and Mortality Among Elderly Persons, JAMA Internal Medicine, 167(4), Retrieved on 25 Jan. 2013 from http://archinte.jamanetwork.com/article.aspx?articleid=412862#METHODS.

Balgir R.S. (2011), Genetic Disease Burden, Nutrition and Determinants of Tribal Health Care in Chhattisgarh State of Central-East India. *Online Journal of Health and Allied Sciences, Mangalore*,10(1).

Balgir, R.S., (2004).Health Care Strategies, Genetic Load and Prevention of Hemoglobin Prthies in Tribal Communities of India, *South Asian Anthropologist, 4 (2).*

Banerji, D., (1982). Poverty, Class and Health Culture in India, Prachi Prakashan, New Delhi

Baruah. M & Kalita. D, (2005), Ethnomedicine used by Mishings tribes of Dibrugarh district, Assam' *Indian Journal of Traditional Knowledge*, 6(4), pp. 595-598.

Basu, S.K. & Kshatriya, G.K., (1989). Fertility and Mortality in Tribal Population of Bastar District, M.P. *Biology and Society*, 6(3),100-112

Basu, S.K. (1990). Determinants of Health Seeking Behaviour among the Tribal Population of Bastar District, Madhya Pradesh, India. *South Asian Anthropologist, 11:1-6*

Basu, S.K., (1994). Health Problems and Health Care of the Tribal Population of India. In. N. Mahanti (Ed.). Tribal Economy and Wasteland Development, (pp. 137-146). Inter-India Publications, New Delhi

Bhasin, V., (1990). Habitat, Habitation and Health in the Himalayas: A Comparative Study of the People of Sikkim and the Gaddis of Himachal Pradesh. Kamla-Raj Enterprises, Delhi.

Bhasin, V., (1994). People, Health and Disease: *The Indian Scenario*, Kamla-Raj Enteprises, Delhi.

Bhattacharya, P., (1995). Folk Medicinal Claims for the treatment of Venereal Diseases from Patalkot Valley of Chhindwara District (M.P.), *South Asian Anthropologist*, 16:19-21

C. Richa, C. Suman, M. Mitashree & B. Premananda., (2009). A Study of Reproductive and Child Health among the Dhur Gond Tribal Community of Mahasamund District, Chhattisgarh, India, Kamla-Raj, Stud Tribes Tribals, 7(2): 97-103 .

Carstairs, G.M. (1955). Medicine and Faith in Rural Rajasthan. In: Benjamin D. Paul (Ed.). *Health, Culture and Community*, Russel Sage Foundation, New York.

Chakravarty, M. & Singhrol, C.S., (1989). Socio-Cultural and Environmental Aspects of Health and Nutrition. In A.N. Sharma (Ed.) *Anthropology: Some Socio-Demographic and Nutritional Aspects of Health*. (pp. 9-12). Northern Book Centre, New Delhi.

Chao, D. et al., (2004). Psychological well being of The Elderly among the Nagas. In Kalia & Joshi. (Eds.), *Tribal Health & Medicine*, by Concept. Delhi

Chatterjee, M. (1988) *Implementing Health Policy* (2 ed.) Manohar/ Ramesh Jain, New Delhi, India

Chauhan, P., Chauhan. V.K.S, Shrivastava, P. (2007), Rural Epidemiology of Maternal Mortality in Tribal women from Bastar, Chhattisgarh, India, *International Journal of Biological & Medical Research*, 2011; 2(4): 1106 – 1109.

Cox. P. A., Balick. M., The ethno botanical approach to drug discovery. In Williams LAD (Ed.) Sci Am 1994; 270: 82–7, Ethno medicine, *West Indian Med J* 2006; 55 (4), 215

Das, F.A., Barua. I & Das. D.D, (2005). Ethno-Medicinal Practices-A Case Study among the Sonowal Kacharis tribe of Dibrugarh, Assam, Kamla-Raj, Ethno-Med., 2(1): 33-37, Retrieved 22 May, 2016 from http://www.krepublishers.com/...Das.../EM-02-1-033-08-031-Das-F-A-Tt.p

Das, R., and Sharma, J. (2004). Antenatal, Natal and Postnatal Health Care Practices Among The Idu-Mishmis of Arunachal Pradesh, *South Asian Anthropologist*, 4(2)

Dave, P.C., (1960). The Grasias. Bhartiya Adim Jati Sewak Sangh, Kingsway, Delhi

Devarapalli, P.S., (1996). Maternal Care and Obstetric Practices among the Konda Gora Tribe. *Journal of Family Welfare*, 39:44

Elwin, V., (1955). The Religion of an Indian Tribe. Oxford University Press. London.

Filippelli, G., M. (2008). Could Water Cure A US Public Health Menace? Chronic Lead Poisoning From Urban Soils. Retrieved January 24, 2013 from http://www.eurekalert.org/pub_releases/2008-08/iu-clp081908.php

Fuchs, S., (1964). Magic-Healing Techniques Among the Balahis in Central India. In Arikiev (Ed.), *Magic, Faith and Healing: Studies in Primitive Psychiatry Today*. (pp. 121-138) Free Press, Glencoe.

Ganjiwale. J, (2012). Current Health Status of Women in India - Issues and Challenges, Review Article, healthline, 3(2), 2229-337X, pp 60-63

Ghoushmalik, S.K. & Karmohapatra, R.K., (1995). Health Situation of the Juangs of Orissa. *South Asian Anthropologist*, 16:79-83

Gopalan,S., Shiva,M. (Ed.). (2000). *National Profile on Women, Health and Development*, VHAI and WHO, New Delhi.

Gupta. R., et al. (2007). Ethno medicinal uses of some plants used by Gond tribe of Bhandara District, Maharashtra, *Indian Journal of Traditional Knowledge*,9(4), (pp. 713-717) .

Hasan, K.A., (1967). Cultural Frontiers of Health in Village India. Manaktalas, Bombay

Hazarika., P. & Pandey. B. K, (2006), Traditional phyto-remedies for worm infestations of two important tribal communities of Assam, India, *Asian Journal of Traditional Medicines*, 5 (1).

Hemlata, O. & Kumari, P.K., (2004). Health Care Practices Among Tribes of Manipur, In Kalia & Joshi (ed.), *Tribal Health & Medicines by Concept*. Delhi

Jaggi, O.P., (1973). Folk Medicine. Atma Ram, New Delhi

Kachare, S.V., Surywanshi S. R, & Raut. k.s, on (2010). Ethno medicinal plants of Nanded and Beed district from Marathwada, Maharashtra, *International Journal of Current Research*, Vol. 5, (pp.014-016),

Kadhirvel. K. et al. (2008). Ethno medicinal Survey on Plants used by Tribals in Chitteri Hills Dharmapuri, Tamilnadu, India, *Environ. We Int. J. Sci. Tech.* 5 (2010) 35-46, 0975-7120 .

Kaiser. (2009). Job Losses Have Negative Effect On Health, Study Finds, Retrieved 24 Jan. 2013 from http:// www.medicalnewstoday.com/releases/149685.php

Kapil, U., Singh,P., and Pathak,P. (2003). Serum zinc levels amongst tribal population in a district of Jharkhand State, India: A pilot study. *Eastern Journal of Medicine*, 8, 33-34.

Kapoor, A.K., (1994). Ecology and Tribals in Central Himalayas. In A. K. Kapoora nd S. Kapoor (Eds.). *Ecology and Man in the Himalayas*. M.D. Publication, New Delhi

Karkal, M. (1995),Our Health: Hoe Does it Count? – An overview, In: *Our Lives our Health*, Dr. Malini Karkal (Eds.). Co-ordination unit. World conference on women - Beijing '95'. Aug. 1995. (P. 191).

Khongodier, R., (2002). Fertility and Mortality Differentials Among The War Khasi of Meghalaya In S. Sengupta (ed.). *Tribal Studies in North East India*, Mittal Pub. Delhi

Koepke, T. (2006).Combined, Genes And Environment Affect Health More Than They Do Alone. Retrieved 24 Jan. 2013 from http://www.medicalnewstoday.com/releases/38934.php

Koepke,T. "Combined, Genes And Environment Affect Health More Than They Do Alone."Medical News Today. MediLexicon, Intl., 7 Mar. 2006. Web. 24 Jan. 2013. http://www.medicalnewstoday.com/releases/38934.php

Kotal, M., (2004). The Koch of Meghalaya: A Bio-Demographic Study, *Journal of Social Anthropology*, Vol. I (2)

Krippner, S., (2003). Models of Ethno medicinal Healing. Paper Presented at the Ethno medicine Conferences, Munich, Germany.

Kuriyan. J. (1982)., Tribal Health Programme, Health and Population - Perspectives & Issues, Centre for Development Studies and Activities, 5(1):44-54.

Lewis, O., (1958). Village Life in Northern India. Random House, New York

Lowe. H., Payne-Jackson. A., Beckstrom-Sternberg. S. M., Duke. J. A., (2000). Jamaica's Ethno medicine: Its potential in the healthcare system. Canoe Press, University of the West Indies, Kingston, Jamaica.170.

Mahapatra, S., (1990). Cultural Patterns in Health Care: A View from Santal World. In B. Chaudhuri (Ed.), *Cultural and Environmental Dimensions of Health*, (pp. 249-258). Inter-India Publications, New Delhi.

Maharatna, A., (2005), Demographic Transition of India's Tribes, OUP, Delhi.

Mann, R.S. and K. Mann, (1986). Religious Attributes and Cure in Tribal India. In B. Chaudhuri (Ed.): *Tribal Health: Socio-Cultural Dimensions*. (pp. 171-184). Inter-India Publications, New Delhi.

Marak, L., (2004). Supernatural Beliefs Connected with Child Birth Among The Garos of Assam, *Oriental Anthropologist*, Vol. 4 (2).

Marriott, M., (1955). Western medicine in a Village of Northern India In B.D.Paul (Ed.), *Health, Culture and Community*. (pp. 239-269). Russel Sage Foundation, New York

McKenney, A. S. (2008).Adolescents Have Better Mental Health When They Express Ethnic Identity In Clothing, Retrieved January 24, 2013 from http://www.medicalnewstoday.com/articles/103965.php

Mishra, N. R. (2005). Dynamics of caste-based deprivation in child under-nutrition in India. *Report Presented at the National Seminar on Development of Scheduled Castes in India: An Appraisal of Implementation of Programmes*. At MPISSR, Ujjain, Madha Pradesh, January 17-19.

Mitra, K. and Basu, K., (1998). Health Problems and Practices of Slum Women of Delhi. *South Asian Anthropologist*, 19: 37-43

Mohanta. R. K, Rout S.D. & Sahu. H.K. (2003). Ethnomedicinal Plant Resources of Similipal Biosphere Rreserve, Orissa, India, *Zoo's Print Journal* 21(8): 2372-2374, 0973-2551.

Nagda, B. L. (2004).Tribal population and health in Rajasthan. *Studies of Tribes and Tribals,* 2,1-8.

National Family Health Survey-3, (2005-06), Ministry of Health and Family Welfare, Government of India, International Institute for population sciences, Deonar, Mumbai 400 088

Nauert, R. (2016). Family Support Mitigates Suicidal Behavior. *Psych Central*. Retrieved on September 1, 2016, from http://psychcentral.com/news/2009/04/14/family-support-mitigates-suicidal-behavior/5315.html

Negi C.S., N. Sunil et al. (2002), Ethnomedicinal Plant Uses in a Small Tribal Community in a Part of Central Himalaya, India, October, 1999, Kamla-Raj 2003 J. Hum. Ecol., 14(1): 23-31.

Nordqvist, C. (2005) .Low socioeconomic status may increase heart attack and stroke risk for men, Retrieved January 24, 2013 from http://www.medicalnewstoday.com/releases/34263.php

Nordqvist, C. (2015). What Is Health? What Does Good Health Mean? Retrieved Jan 24. 2013 from http://www. medicalnewstoday.com/articles/150999.php

Opler, M. E., (1963), The Cultural Definition of Illness in Village India. Human Organization, 22: 32-35.

Pacholi, S., (1993). Medical Geography of Malaria in Madhya Pradesh. Northern Book Centre, New Delhi,

Pandey, G. D. & Tiwary, R.S., (1993). Socio-Cultural Characteristics and Health Seeking Behaviour of the Hill Korwas. *Journal of Family Welfare*, 39:44

Pandey, G. D., Roy and Tiwary, R.S., (1996). Socio-Cultural Characteristics and Health Seeking Behaviour of the Khairwar of Madhya Pradesh. *Journal of Family Welfare*, 42:49

Patwardhan, A. (2000). Dams and tribal people in India. In: Thematic Review I.2: Dams, Indigenous people and vulnerable ethnic minorities. *Official Home Page of World Commission on Dams. Cape Town South Africa.*

Phys. Org (2008). *Ethnic identity expressed in clothing is good for adolescent's mental health*. Retrieved on August 20, 2015 from http://phys.org/news/2008-04-ethnic-identity-good-adolescents-mental.html

Rajadurai. M., Vidhya. V.G., Ramya. M., & Bhaskar A., (2008), Ethnomedicinal Plants, Pachamalai Hills, Tamilnadu, India. Kamla-Raj 2009 Ethno-Med, 3(1): 39-41.

Ramchandra, P. (2002).Health Nutrition, Population Vision 2020, in: Indian Vision 2020, Planning Commission, Govt. of India.

Randerson, J. (2008), Diesel fumes produce stress response in brain, study shows, Retrieved on 23 March, 2013 from https://www.theguardian. com/science/2008/mar/11/medicalresearch. pollution

Ranganathan. R. et al. (2011), Ethno medicinal Plants and their Utilization By villagers in Jawadhu Hills of Thiruvannamalai District of Tamilnadu, India. Dec. 2009. *International Journal of Pharmaceutical Research & Development (IJPRD)*, 4(04),174 - 183 ISSN 0974 – 9446.

Rao, D, H., Rao, M, K., Radhaiah,G., and N. P. Rao,N,P. (1994).Nutritional status of tribal preschool children in three ecological zones of Madhya Pradesh. *Indian Pediatric,* 31,635-640.

Rao, G.R. et al., (2004). Nutritional Status of Children in Northeast India, *Asia Pacific Population Journal,* Vol. 19(3)

Reddy, P. H., Petrou, M., Reddy,A,P., Tiwary,S,R., and Modell,B. (1995).Hereditary anaemias and iron deficiency in a tribal population (the Baiga) of central India. *European Journal of Haematology,* 55 ,103-109.

Rout. S. D., Panda T. & Mishra N., (2008)., Ethno-medicinal Plants Used to Cure Different Diseases by Tribals of Mayurbhanj District, North Orissa, Kamla-Raj 2009, Ethno-Med, 3(1): 27-32 .

S. Bani., D. Madhusnata., D. Indrajit., P. Sandeep., et al. (2002)., Haemoglobinopathies in Tribal Populations of Arunachal Pradesh and Tripura (North East India), Kamla-Raj 2002, *Int J Hum Genet*, 2 (3),169-17.

Sachchidananda, (1994). Socio-Cultural dimensions of tribal Health. In S. Basu (Ed.). Tribal Health in India. (pp. 57-69), Manak Publications, New Delhi

Sahu S. C et al,.(2010)'Potential Medicinal Plants' Used by the Tribal of Deogarh District, Orissa, India, Ethno Med, 4(1),53-61 (2010),

Schwarz. J, (2009), Family Ties Provide Protection Against Young Adult Sucidal Behavior. Retrieved 24 January 2013 from http:// www.medicalnewstoday.com/releases/145941.php

Shukla. R., & Chakravarty. M., (2009). Study of Traditional Medicinal Practices among the Raj-Gonds tribes of Korba District of Chhattisgarh, Kamla-Raj 2010, Ethno Med, 4(3): 211-216, 0973-5070.

Silja. V. P., Varma. K. S., & Mohanan. K.V., (2005). Ethno-medicinal plant knowledge of the Mulla Kuruma tribe of Wayanad district, Kerala, *Indian Journal of Traditional Knowledge,* 7(4), (pp. 604-612).

Singh, H. B. and Arora,K,R. (1978).Wild edible plants of India.ICAR publication, New Delhi. in: Sundriyal, M. and R. C. Sundriyal. (2004). Wild edible plants of the Sikkim Himalaya: Nutritive values of selected species. *Economic Botany,* 58:286-299

Singh, U.P. (2003), Trends Of Mortality among Bhoxa Tribe of Uttaranchal, *The Oriental Anthropologist*, 3 (1), 0972-558X.

Singh. P. Lakhwinder and Gupta. D. Shiv, (1996), Health Seeking Behaviour and Healthcare Services in Rajasthan, India: A Tribal Community's Perspective, Institute of Health Management Research, JAIPUR, IIHMR Working Paper No. 1. Retrieved

10 Sept. 2013 from http://www.jaipur.iihmr.org/Research/publication%20files/Workingp/1.pdf

Sonowal. C. J., (2010). Factors Affecting the Nutritional Health of Tribal Children in Maharashtra, Kamla-Raj 2010 Ethno Med, 4(1),21-36.

Sonowal. C.J. & J. Sunil Kumar., (2003), Radiation and Tribal Health in Jadugoda- The Contention between Science and Sufferings, © Kamla-Raj 2003 Stud. Tribes Tribals, 1(2): 111-126

Swain, S., (1994). Health Disease and Health Seeking Behaviour of Tribal People of India. In S. Basu (Ed.), *Tribal Health of India*. Manak Publications, New Delhi.

Tokar, S. (2006, Aug. 5), Low Literacy Increases Risk Of Death And Misunderstanding Of Medical Consent Forms. Retrieved 5 Aug. 2013 from https://www.ucsf.edu/news/2006/08/5452/low-literacy-increases-risk-death-and-misunderstanding-medical-consen

Tripathi. R, Dwivedi. S.N. & Dwivedi. S., (2008). Ethno-medicinal plants used to treat gynecological disorders by tribal people of Madhya Pradesh, India, *International Journal of Pharmacy & Life Sciences,* ISSN 0976-7126, 1(3),160-169

Webber, C. (2008). Brain Stress Caused By Diesel Exhaust Inhalation, Retrieved January 22, 2013 from http://www. medicalnewstoday. com/releases/100164.php

Willett, W. (1998). *Nutritional Epidemiology.* 2nd Ed. Oxford: Oxford University Press.

World Health Organisation (2014). Mental Health: A Satate of Well-being, Retrieved on Sept. 15, 2014 from www.who.int/features/factfiles/mental-health/en/

World Health Organization. (2003). *Traditional Medicine*. Fact sheet No 134. http:// www.who.int/mediacentre/factsheets/fs 134/en/

Web Source

http://www.medilexicon.com/medicaldictionary.php

http://www.sociologyguide.com/tribal-society/index.php

http://www.sociologyguide.com/tribal-society/characteristics.php

http://www.sociologyguide.com/tribal-society/geographical.php

http://www.sociologyguide.com/tribal-society/tribal-caste-continuum.php

http://www.sociologyguide.com/tribal-society/exploitation-and-unrest.php

http://www.sociologyguide.com/tribal-society/problems-of-tribal.php

http://www.sociologyguide.com/tribal-society/tribal-development-efforts.php

http://dict.hinkhoj.com/words/meaning-of-TRIBE-in-hindi.html

http://www.cuts-ccier.org/cohed/pdf/Access_to_Healthcare.pdf

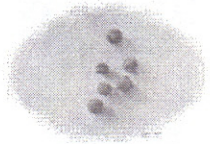
http://www.measuredhs.com/pubs/pdf/FRIND3/00FrontMatter00.pdf

http://www.indianetzone.com/51/chakma_tribes.htm

http://www.indianetzone.com/10/tripuri_tribe.htm

Different medicinal plants, parts and using process

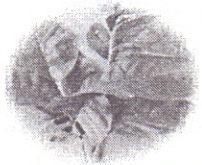
Annexure-I

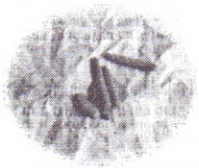
SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
1		*Kespa*	*Not Identified*	*Roots*	*Arthritis (Baat)*	*After collecting this root they grind it very nicely and add some jaggery (Gur) and make a tablet and to take 1 tablet per day after meal.*
2		*Balsakao*	*Not Identified*	*Roots*		
3		*Tablet*	*Not Identified*			
4	Not found	*Yangma & Sukhchaoma leaves & Makal stem*	*Not Identified*	Leaves and roots, Stem	Fracture	*After grinding all parts, they add it with the yellow part of eggs and some mustard oil. After that they mix all the materials. Later they heat the knife and cut little bit in affected area and then put the medicine on it. It is applying for 1-3 weeks regularly.*

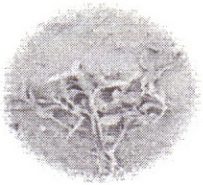
SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
5		*Neem pata*	*Azadirachata Indica*	Leaves	Itching problem Loose motion	*At first boil the neem leaves and then make cool and take bath with the solution.* *This leaves should boil in a bamboo pipe and then keep it cool and drink only water until it gets well.*
6		*Saimanda leaves*	*Acorus Calamus*	Leaves	Cough	*This leaves should boil in a bamboo pipe with some tulshi leaves and after boiling they add some honey & then take the solution until it gets well.*
7		*Bamlai tree*	*Not Identified*	Roots	Fever	*Grind the roots and mix it with cool water and paste this solution on forehead.*
8		*Chan root, banana (chapa) root, Mthaimkloy seeds (Chimra)*	*Not Identified*	Roots, Seeds	High fever	*Grind all the parts and squish the solution. And they take only the juice.*

SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
9		*Mukhra faiko lata*	*Not Identified*	Stem	Low eye power	*At first cut the stem, then some liquid will come and they put it in eyes.*
10		*Chamathuikla*	*Not Identified*	Stem	Burn, patch, Itching	*After grinding the stem it becomes dust and then put it in the affected area.*
11		*Dust of Chamathuikla*				
12	Not found	*Amai tree*	*Not Identified*	Peel of stem	Jaundice	*By this amai peel (Chal) they make pitha and take it for decreasing jaundice.*
13		*Patharkuchi*	*Not Identified*	Leaves	Bat	*Juice of this leaves can be taken for preventing bat disease.*

SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
14		*Samnama, Bamlai*	*Sida Sp.*	Leaves	Fever, Headache	*Grinding the leaves and add sugar. Solution folds in a part of cloth and squish. Then take only jucie.*
15		*Buraha ganja*	*Ageratum Conyzoides*	Leaves	Decentry (Amashay)	*Boil this leaves by mixing onion, dry fish and then grind and take with meal*
16		*Buglipata*	*Cordia Sp*	Leaves	Fracture	*It has to grind and fold it in a banana leaves and then make it hot by putting near the fire and then they scroll and put it in affected area and bind it.*
17		*Samtakhhi*	*Not Identified*	Leaves	Cut	*After grinding the leaves then put in the cutting area.*

SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
18	Not found	*Jatmari guta (black)*	*Not Identified*	Seeds	Pregnancy pain	*At first make the dust by grinding it and add with local wine (Brandi). Then take it few quantities for reducing pain and can consume more food.*
19		*Bel leaves*	*Aegle Mermelos*	Leaves	Fever & vomiting	*After squishing the bel leaves with water then we put in the glass and add some sugar and take.*
20		*Kacha halud (Turmeric)*	*Cuscusma Domestica*	Stem/root	*Ulta dheg* (khakchamo)	*Grind the halud at first and add some honey and take only juice.*
21		*Bohlai tree*	*Not Identified*	Leaves	Fracture	*It has to grind and mix with 'bogli' pata fold it in a banana leaves and then make it hot by putting near the fire and then they scroll and put it in affected area and bind it.*

SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
22		*Long*	*Syzygium Aeromaticum*	Long	Liver problem	*First of all mixed all the spices together and grind it and mixed some jaggery and make a paste and then divide into 'ball' type shape and dry it. And take twice in a day before meal.*
23		*Tapoi (Pupil)*	*Peper Sp*	Tapoi		
24		*Gulmarich*	*Piper Longum*			
25		*Duboyeah*	*Not Identified*	Stem	Abdominal pain	*Cut the stem into pieces and soak it in the water for around 30 minutes then consume the liquid, which tastes bitter.*

SL	Plants and parts	Local name	Scientific Name	Parts of Using	Purpose of use	Process of use
26		*Sangoda*	*Euphorbia/ Suprema Coce*	Leaves and stem	Itching/Infection of skin	*At first boil the leaves and stem together and take bath without soap for several times.*
27		*Khremaicho*	*Not Identified*	Leaves	bleeding	*Grind the leaves and put it in the infected area and cover it properly with the bandage.*
28		*Sorbojala*	Combretum Sp.	Leaves	Swallen legs etc.	*It has to grind and fold it in a banana leaves and then make it hot by putting near the fire and then they scroll and put it in affected area and bind it.*
29	Not found	*Bachuindai*	*Not Identified*	Root	Joint pain	*Polishing/ paste the root and then rub it on the pain area.*

ABOUT THE AUTHORS

Dr. Manoshi Das, b.1976, is freelancer Trainer and Researcher. She did her M.Sc. and Ph.D. in Anthropology from Visva-Bharati University, West Bengal. Dr. Das is author of 4 books and more than 25 research papers. She is involved in research studies on different aspects of Tribal, Gender and Health issues as Director (Research), BMPSS (Institute for Inclusive Development) - a not-for-profit Social Organisation.

Prankrishna Banik, b. 1988, is Research Scholar at Department of Rural Management and Development, Tripura University. He is also engaged as an academic counsellor at IGNOU, Women's college study centre, Agartala. He had obtained his Bachelor degree B.Sc. from Netaji Subhash Mahavidyalaya, Udaipur (2010) and completed Master degree in Rural Management and Development (MRMD) from Tripura University (2012). He has also presented papers in National and International seminar and published research articles on various rural development perspectives and tribal issues. His research areas of interest are Tribal life and culture, specially primitive tribes, tribal livelihood issues, forest rights etc.

ISBN : 978-81-932589-5-8